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UNIVERSITY OF OREGON ANNUAL SESSION

EUGENE, OREGON

UNIVERSITY OF OREGON

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1968-69

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OREGON STATE SYSTEM OF HIGHER EDUCATION

UNIVERSITY OF OREGON BULLETIN

NUMBER 147

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**UNIVERSITY
OF OREGON
REGULAR
SESSION**

1968-69 CATALOG

EUGENE, OREGON

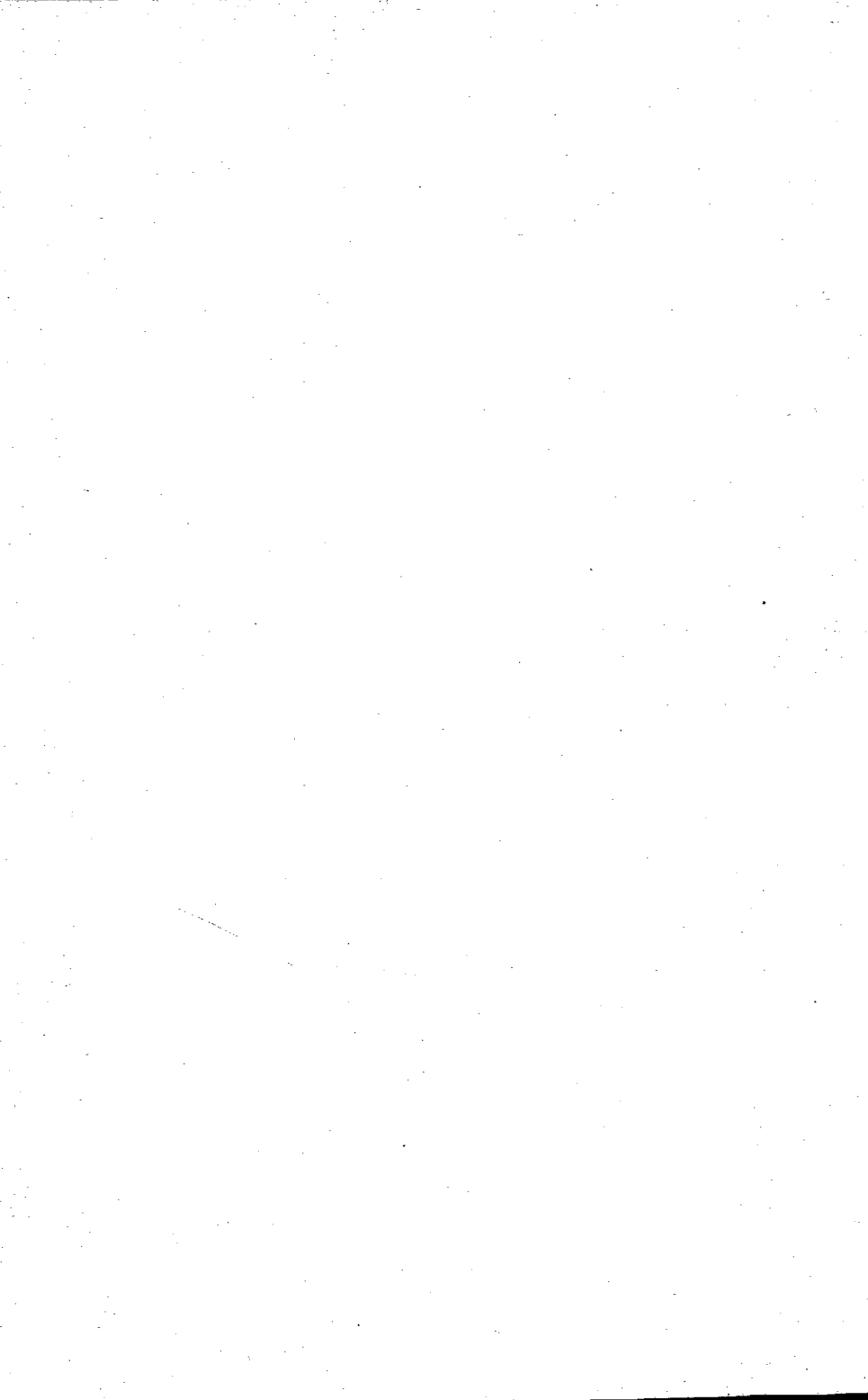


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Oregon State System of Higher Education

The Oregon State System of Higher Education was organized in 1932 by the State Board of Higher Education following a survey of higher education in Oregon by the U. S. Office of Education. Member institutions are elements of an articulated system, parts of an integrated whole. The educational program is so organized as to distribute as widely as possible throughout the state the opportunities for general education and to center on a particular campus specialized, technical, and professional curricula closely related to one another.

The institutions of the State System of Higher Education are the University of Oregon at Eugene, Oregon State University at Corvallis, Portland State College at Portland, Oregon College of Education at Monmouth, Southern Oregon College at Ashland, Eastern Oregon College at La Grande, and Oregon Technical Institute at Klamath Falls. The University of Oregon Medical School and the University of Oregon Dental School are located in Portland. The Division of Continuing Education, representing all the institutions, has offices in Ashland, Corvallis, Eugene, La Grande, Monmouth, Portland, and Salem.

At Oregon College of Education, Southern Oregon College, and Eastern Oregon College, students may complete major work in teacher education or general studies or enroll in a preprofessional program. Southern Oregon College offers a major program in business.

Portland State College offers major work in general studies and selected liberal arts and professional fields as well as certain preprofessional programs.

At the University of Oregon and Oregon State University, major curricula, both liberal and professional, are grouped on either campus in accordance with the distinctive functions of the respective institutions in the unified State System of Higher Education.

Oregon Technical Institute offers technological curricula leading to associate degrees in technical and semiprofessional areas.

An interinstitutional booklet, *Your Education*, which outlines the curricula of the several institutions and contains other information, is available. For a copy, write to Division of Publications, P.O. Box 5175, Eugene, Oregon 97403.

State Board of Higher Education

	Term Expires
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Office of State Board of Higher Education
Post Office Box 3175
Eugene, Oregon 97403

Board members are appointed to six-year terms by the Governor of Oregon with confirmation by the State Senate.

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President, University of Oregon

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University of Oregon

September 1968

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December 1968

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January 1969

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Fall Term, 1968-69

August 30, *Friday* Last day to apply for fall-term admission without penalty

September 22-28, *Sunday to Saturday* New Student and Registration Week

September 30, *Monday* Classes begin

October 4, *Friday* Last day for payment of fees without penalty

October 11, *Friday* Last day for fall-term registration

October 18, *Friday* Last day to change courses

November 28-December 1, *Thursday to Sunday* Thanksgiving vacation

December 13, *Friday* Fall-term graduation convocation

December 16-20, *Monday to Friday* Fall-term examinations

Winter Term, 1968-69

January 6, *Monday* Registration

January 7, *Tuesday* Classes begin

January 10, *Friday* Last day for payment of fees without penalty

January 17, *Friday* Last day for winter-term registration

January 24, *Friday* Last day to change courses

March 14, *Friday* Winter-term graduation convocation

March 17-21, *Monday to Friday* Winter-term examinations

Academic Calendar

March 1969

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30	31					

April 1969

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May 1969

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June 1969

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July 1969

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August 1969

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Spring Term, 1968-69

March 31, <i>Monday</i>	Registration
April 1, <i>Tuesday</i>	Classes begin
April 4, <i>Friday</i>	Last day for payment of fees without penalty
April 11, <i>Friday</i>	Last day for spring-term registration
April 18, <i>Friday</i>	Last day to change courses
May 30, <i>Friday</i>	Memorial Day, holiday
June 9-13, <i>Monday to Friday</i>	Spring- term examinations
June 14, <i>Saturday</i>	Alumni Day
June 15, <i>Sunday</i>	Commencement Day

Summer Sessions, 1969

June 23, <i>Monday</i>	Registration
June 24, <i>Tuesday</i>	Classes begin
June 27, <i>Friday</i>	Last day for payment of summer-term fees without penalty
July 3, <i>Thursday</i>	Last day for summer-term registration
July 4, <i>Friday</i>	Independence Day, holiday
July 11, <i>Friday</i>	Last day to change courses
August 15, <i>Friday</i>	Eight-week session ends
August 16, <i>Saturday</i>	Summer-term graduation convocation
September 5, <i>Friday</i>	Eleven-week session ends

Fall Term, 1969-70

August 31, <i>Sunday</i>	Last day to apply for fall-term admission without penalty
September 21-27, <i>Sunday to Saturday</i>	New Student and Registration Week
September 29, <i>Monday</i>	Classes begin

University of Oregon

Officers of Administration

ARTHUR S. FLEMMING, LL.D.	President
WILLIAM C. JONES, Ph.D.	Dean of Administration
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CHARLES T. DUNCAN, M.A.	Dean of Faculties
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HERBERT L. PENNY, B.S.	Assistant to the President
<hr/>	
DAVID W. E. BAIRD, M.D., LL.D.	Dean, Medical School
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JOHN L. HULTENG, M.S.	Dean, School of Journalism
PAUL B. JACOBSON, Ph.D.	Dean, School of Education ; Director, Summer Sessions
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RICHARD W. LINDHOLM, Ph.D.	Dean, College of Business Administration
LEROY C. MERRITT, Ph.D.	Dean, School of Librarianship
†EUGENE F. SCOLES, J.D., LL.M., J.S.D.	Dean, School of Law
NORMAN D. SUNDBERG, Ph.D.	Dean, School of Community Service and Public Affairs
LOUIS G. TERKLA, D.M.D.	Dean, Dental School
LEONA E. TYLER, Ph.D.	Dean, Graduate School
ROBERT M. TROTTER, Ph.D.	Dean, School of Music
<hr/>	
VERNON L. BARKHURST, M.A.	Director of Admissions
H. PHILIP BARNHART, B.S.	Director of Dormitories
GEORGE N. BELKNAP, M.A.	University Editor
ROBERT L. BOWLIN, D.Ed.	Associate Dean of Students (Dean of Men)
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RICHARD C. REYNOLDS, M.Ed.	Director of Erb Memorial Union
EUGENE W. DILS, Ed.D.	Director of Placement Service
DONALD M. DUSHANE, M.A.	Dean of Students
ALFRED L. ELLINGSON, B.S.	Director of Development
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CARL W. HINTZ, Ph.D.	Librarian
J. ORVILLE LINDSTROM, B.S.	Director of Fiscal Affairs
WALTER N. McLAUGHLIN, B.S., C.P.A.	Business Manager
JULIAN S. REINSCHMIDT, M.D.	Director of Health Service
JAMES M. SHEA, M.S.	Director of University Relations
GOLDA P. WICKHAM, B.S.	Associate Dean of Students (Dean of Women)
CARRYL WINES	Superintendent of University Press
IRWIN I. WRIGHT, B.S.	Director of Physical Plant

* On leave of absence 1967-68.

† Appointment effective July 1, 1968.

University Faculty*

- KENNETH E. ABBEY, M.B.A., Research Associate, Office of Planning and Institutional Research, with the Rank of Assistant Professor.
B.A. (1960), M.B.A. (1962), Washington. At Oregon since 1966.
- MAX G. ABBOTT, Ph.D., Professor of Education; Deputy Director, Center for Advanced Study of Educational Administration.
B.S. (1949), M.S. (1951), Utah State; Ph.D. (1960), Chicago. At Oregon since 1966.
- HAROLD ABEL, Ph.D., Professor of Education; Director, Division of Psycho-educational Studies.
B.A. (1949), M.A. (1951), Ph.D. (1958), Syracuse. At Oregon since 1965.
- EDWIN A. ABRAHAMSON, Registrar, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1965.
- KEITH A. ACHESON, Ed.D., Associate Professor of Education.
B.S. (1948), M.Ed. (1951), Lewis and Clark; Ed.D. (1964), Stanford. At Oregon since 1967.
- JOAN R. ACKER, M.A., Assistant Professor of Sociology.
B.A. (1946), Hunter; M.A. (1948), Chicago. At Oregon since 1964.
- MARTIN H. ACKER, Ph.D., Associate Professor of Education.
B.A. (1943), Brooklyn; M.A. (1953), Ph.D. (1963), New York University. At Oregon since 1961.
- SANDRA M. ACKINCLOSE, M.A., Instructor in Physical Education.
B.S. (1961), Wittenberg; M.A. (1967), Xavier. At Oregon since 1967.
- JOSEPH J. ADAMS, B.B.A., Assistant Dean, Medical School (Professor).
B.B.A. (1949), Gonzaga. At Oregon since 1951.
- JOEL W. ADKINS, Ph.D., Assistant Professor of Psychology.
A.B. (1959), M.A. (1960), San José State; Ph.D., (1966), California at Los Angeles. At Oregon since 1966.
- JACK D. ADLER, D.Ed., Instructor in Physical Education.
B.A. (1951), M.S., (1960), Washington; D.Ed. (1967), Oregon. At Oregon since 1966.
- ROBERT E. AGGER, Ph.D., Professor of Political Science; Director, Institute for Comparative Experimental Research on Behavioral Systems.
B.A. (1948), Williams; LL.B. (1951), Yale; Ph.D. (1954), Oregon. At Oregon since 1958.
- ROBERT C. ALBRECHT, Ph.D., Associate Professor of English.
B.A. (1955), Illinois; M.A. (1957), Michigan; Ph.D. (1962), Minnesota. At Oregon since 1967.
- FLORENCE D. ALDEN, M.A., Professor Emeritus of Physical Education.
A.B. (1904), Smith; M.A. (1928), Columbia. At Oregon since 1921.
- GUSTAVE ALEF, Ph.D., Associate Professor of History.
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- HENRY A. ALEXANDER, JR., Ph.D., Associate Professor of Philosophy; Head of Department.
B.A. (1947), Princeton; M.A. (1951), Ph.D. (1955), California. At Oregon since 1964.

* The principal administrative officials and the heads of departments and divisions of the University of Oregon Medical School, the University of Oregon Dental School, and the University of Oregon School of Nursing in Portland are included in this list; for complete lists of the faculties of these schools, see the school catalogs.

CLIFFORD V. ALLEN, M.D., Professor of Clinical Pathology (Radioisotopes) and Radiology, Medical School; Chairman of Department of Radiation Therapy. M.D. (1933), Iowa. At Oregon since 1955.

*ROBERT L. ALLEN, Ph.D., Professor of Economics.

B.A. (1947), Redlands; M.A. (1950), Ph.D. (1953), Harvard. At Oregon since 1959.

WILLIAM J. ALLEN, B.S., Instructor in Education.

B.S. (1967), Oregon. At Oregon since 1967.

JOSEPH M. ALLMAN, M.A., Acting Assistant Professor of Political Science.

B.A. (1960), Antioch; M.A. (1966), Michigan State. At Oregon since 1966.

*HARRY ALPERT, Ph.D., Dean of Faculties; Professor of Sociology.

A.B. (1932), College of City of New York; Cert. de soc. (1933), Bordeaux; A.M. (1935), Ph.D. (1938), Columbia. At Oregon since 1958.

BOWER ALY, Ph.D., Professor of Speech.

B.S. (1925), Southeast Missouri State; M.A. (1926), Missouri; Ph.D. (1941), Columbia. At Oregon since 1957.

LUCILE F. ALY, Ph.D., Assistant Professor of English.

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BARRY F. ANDERSON, Ph.D., Assistant Professor of Psychology.

B.A. (1957), Stanford; Ph.D. (1963), Johns Hopkins. At Oregon since 1963.

FRANK W. ANDERSON, Ph.D., Professor of Mathematics.

B.A. (1951), M.S. (1952), Ph.D. (1954), Iowa. At Oregon since 1957.

*LESLIE P. ANDERSON, Ph.D., Associate Professor of Finance.

B.S. (1951), M.S. (1954), Ph.D. (1960), Wisconsin. At Oregon since 1964.

TERRY J. ANDERSON, Ed.D., Assistant Professor of Business Education.

B.S. (1957), Colorado; M.B.A. (1960), Ed.D. (1967), Indiana. At Oregon since 1967.

THEODORE R. ANDERSON, Ph.D., Professor of Sociology.

B.A. (1957), Stanford; Ph.D. (1963), Wisconsin. At Oregon since 1966.

DAVID N. ANDREWS, LL.B., Instructor in Business Law.

B.S. (1957), LL.B. (1959), Oregon. At Oregon since 1967.

FRED C. ANDREWS, Ph.D., Professor of Mathematics; Director, Statistical Laboratory and Computing Center.

B.S. (1946), M.S. (1948), Washington; Ph.D. (1953), California. At Oregon since 1957.

GEORGE F. ANDREWS, B.S., N.C.A.R.B., Professor of Architecture.

B.S. (1941), Michigan; N.C.A.R.B. (1954). At Oregon since 1948.

ROMAN R. ANDRUS, Ph.D., Associate Professor of Marketing.

B.S. (1958), Brigham Young; M.S. (1959), Ph.D. (1965), Columbia. At Oregon since 1966.

DEBORAH APPLETON, M.A., Instructor in Dance.

B.A. (1966), California; M.A. (1967), Oregon. At Oregon since 1967.

J. MICHAEL ARMER, Ph.D., Assistant Professor of Sociology.

B.A. (1959), Whittier; M.S., Ph.D. (1964), Wisconsin. At Oregon since 1965.

GEORGE ARNIS, B.A., Instructor in Physical Education.

B.A. (1953), Western State. At Oregon since 1966.

FRANK H. ARNOLD, M.S., Instructor in Physical Education.

B.S. (1956), Idaho State; M.S. (1960), Brigham Young. At Oregon since 1966.

RICHARD D. ARNOLD, M.S., Instructor in Business Administration.

B.S. (1964), M.S. (1966), Portland State. At Oregon since 1967.

* On leave of absence 1967-68.

- GORDON P. ASHBY, M.B.A., Computer Systems Supervisor, Statistical Laboratory and Computing Center, with the Rank of Associate Professor.
B.S. (1959), Oregon State; M.B.A. (1961), California at Los Angeles. At Oregon since 1966.
- DONALD C. ASHMANSKAS, LL.B., Research Assistant, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
A.B. (1960), Rutgers; LL.B. (1966), New York University. At Oregon since 1966.
- ROBERT M. ATKINSON, M.A., Instructor in English.
B.A. (1960), Linfield; M.A. (1964), Oregon. At Oregon since 1965.
- FRED ATTNEAVE III, Ph.D., Professor of Psychology.
B.A. (1942), Mississippi; Ph.D. (1950), Stanford. At Oregon since 1958.
- PHILIP G. AVERILL, B.S., Safety Supervisor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1961), Washington State. At Oregon since 1965.
- CURTIS E. AVERY, M.A., Professor of Education.
B.A. (1925), Pomona; M.A. (1928), Yale. At Oregon since 1946.
- DANIEL M. BACHMAN, M.D., Professor of Medicine, Medical School; Head of Division of Rheumatology.
B.A. (1949), Reed; M.S. (1953), M.D. (1952), Oregon. At Oregon since 1956.
- LAWRENCE H. BACKSTEDT, B.A., Instructor in English.
B.A. (1964), San Francisco. At Oregon since 1967.
- DAVID A. BAERNCOFF, Ph.D., Associate Professor of Business Statistics; Head, Department of Accounting and Business Statistics.
A.B. (1942), Indiana; M.A. (1956), Ph.D. (1961), Stanford. At Oregon since 1958.
- BRYSON R. BAILEY, B.S., Colonel, U.S. Air Force; Professor of Aerospace Studies.
B.S. (1947), Oregon State. At Oregon since 1967.
- EXINE A. BAILEY, M.A., Professor of Music (Voice).
B.S. (1944), Minnesota; M.A. (1945), Diploma (1951), Columbia. At Oregon since 1951.
- J. EDWIN BAILEY, B.A., Assistant University Editor Emeritus (Instructor).
B.A. (1923), Montana. At Oregon since 1938.
- DAVID W. E. BAIRD, M.D., LL.D., Dean of the Medical School; Professor of Medicine.
M.D. (1926), Oregon; LL.D. (1946), Portland. At Oregon since 1927.
- ANDREW S. BAJER, D.Sc., Associate Professor of Biology.
M.A. (1949), D.Sc. (1950), Cracow. At Oregon since 1964.
- LOIS I. BAKER, M.A., Law Librarian; Professor of Library Administration.
B.A. (1927), M.A. (1932), Oregon; Cert. (1935), California. At Oregon since 1935.
- *WALLACE S. BALDINGER, Ph.D., Professor of Art; Director, Museum of Art.
B.A. (1928), M.A. (1932), Oberlin; Ph.D. (1938), Chicago. At Oregon since 1944.
- EWART M. BALDWIN, Ph.D., Professor of Geology.
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- ROLAND C. BALL, JR., Ph.D., Associate Professor of English.
B.A. (1939), Swarthmore; M.A. (1941), Cornell; Ph.D. (1953), California. At Oregon since 1952.
- †THOMAS O. BALLINGER, M.A., Professor of Art.
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- JAMES R. BARCHEK, M.Ed., Instructor in English.
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BURT BROWN BARKER, LL.D., Vice-President Emeritus.

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B.S. (1954), Washington; M.A. (1958), San Francisco State; Ph.D. (1962), Illinois. At Oregon since 1966.

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JEAN E. BOYLE, M.S., R.N., Director, School of Nursing; Professor of Nursing.

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THOMAS A. BRADY, JR., M.A., Assistant Professor of History.

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QUIRINUS BREEN, Ph.D., Professor Emeritus of History.

A.B. (1920), Calvin; Ph.D. (1931), Chicago. At Oregon since 1938.

LESLIE T. BREIDENTHAL, D.M.A., Associate Professor of Music (Voice).

B.S. (1948), M.A. (1949), Columbia; D.M.A. (1965), Michigan. At Oregon since 1967.

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B.S. (1951), Rutgers. At Oregon since 1962.
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- EDGAR W. BREWER, M.A., Visiting Associate Professor, School of Community Service and Public Affairs.
B.A. (1940), Washington; M.A. (1948), Chicago. At Oregon since 1967.
- DAVID BRINKS, Ed.D., Director, University Counseling Center, with the Rank of Associate Professor.
B.S. (1957), Portland State; M.Ed. (1960), Lady of the Lake; Ed.D. (1963), Utah State. At Oregon since 1962.
- JOHN L. BRISCOE, B.Arch. Engr., Reg. Archt., Professor of Architecture.
B.Arch. Engr. (1950), Oklahoma State; N.C.A.R.B. (1955). At Oregon since 1953.
- FORREST L. BRISSEY, Ph.D., Professor of Education.
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- JACQUELINE S. BROCKWAY, M.S., Instructor in Education; Assistant Director, DeBusk Center.
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- JOHN M. BROOKHART, Ph.D., Professor of Physiology, Medical School; Chairman of Department.
B.S. (1935), M.S. (1936), Ph.D. (1939), Michigan. At Oregon since 1949.
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- JUANITA C. BROWN, Supervisor, Work Experience, Tongue Point Job Corps Center.
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- PAULA F. BROWN, M.F.A., Instructor in English.
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- WARREN B. BROWN, Ph.D., Associate Professor of Management.
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B.S. (1961), M.A. (1964), Ball State. At Oregon since 1966.
- WAYNE B. BRUMBACH, Ph.D., Professor of Physical Education.
B.S. (1943), M.S. (1947), Washington; Ph.D. (1959), Oregon. At Oregon since 1956.
- STANLEY W. BRYAN, M.Arch., Reg. Archt., Associate Professor of Architecture.
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At Oregon since 1967.
- LAWRENCE H. FREEMAN, M.A.T., Instructor in English.
B.A. (1959), Wesleyan University; M.A.T. (1960), Johns Hopkins. At Oregon since 1965.
- ROBERT S. FREEMAN, Ph.D., Associate Professor of Mathematics.
B.A.E. (1947), New York University; Ph.D. (1958), California. At Oregon since 1967.
- BERNARD L. FREEMESSER, M.S., Associate Professor of Journalism.
B.A. (1950), San Diego State; M.S. (1952), Oregon. At Oregon since 1955.
- GERALD L. FREI, M.S., Head Football Coach with the Rank of Professor; Assistant Professor of Physical Education.
B.S. (1948), M.S. (1950), Wisconsin. At Oregon since 1955.
- COLETTE M. FREITAG, Instructor in French.
At Oregon since 1965.
- SHARON FRIED, B.A., Instructor in Communications Skills, Tongue Point Job Corps Center.
B.A. (1962), Benedictine Heights. At Oregon since 1967.
- ROBERT P. FRIEDMAN, Ph.D., Professor of Speech; Associate Director, Committee on Discussion and Debate.
B.A. (1948), North Carolina; M.A. (1950), Ph.D. (1954), Missouri. At Oregon since 1965.
- ARTHUR W. FRISCH, Ph.D., M.D., Professor of Microbiology, Medical School; Chairman of Department.
B.A. (1931), M.A. (1933), Ph.D. (1935), M.D. (1937), Wisconsin. At Oregon since 1946.
- PAUL M. FRISHKOFF, M.B.A., Acting Assistant Professor of Accounting.
B.A. (1960), Swarthmore; M.B.A. (1962), Chicago. At Oregon since 1967.
- PEGGY M. FRONE, B.A., B.L.S., Browning Room Librarian.
B.A. (1962), Pacific; B.L.S. (1964), British Columbia. At Oregon since 1964.
- ARTHUR E. FRY, D.D.S., Professor of Dentistry, Dental School; Head of Department of Oral Diagnosis.
D.D.S. (1940), Iowa. At Oregon since 1953.
- ROBERT Y. FUCHIGAMI, Ed.D., Associate Professor of Education.
B.A. (1956), M.A. (1958), San Jose State; Ed.D. (1964), Illinois. At Oregon since 1966.
- EMIL D. FURRER, M.D., Associate Professor of Health Education.
B.A. (1926), M.D. (1929), Oregon. At Oregon since 1947.
- RICHARD P. GALE, Ph.D., Assistant Professor of Sociology.
B.A. (1960), Reed; M.A. (1962), Washington State; Ph.D. (1968), Michigan State. At Oregon since 1967.

STEPHEN H. GAMBLE, M.B.A., Instructor in Business Administration.

B.A. (1964), Knox; M.B.A. (1966), Indiana. At Oregon since 1967.

JOHN F. GANGE, M.A., Professor of Political Science; Director, Institute of International Studies and Overseas Administration.

B.A. (1932), M.A. (1934), Stanford. At Oregon since 1961.

EDWIN A. GARDNER, M.A., Instructor in French.

B.A. (1955), Idaho; M.A. (1967), Oregon. At Oregon since 1967.

RICHMOND R. GARRIGUS, M.A., Instructor in English.

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FOREST J. GATHERCOAL, LL.B., Placement Counselor, with the Rank of Assistant Professor.

B.Mus. (1957), LL.B. (1966), Oregon. At Oregon since 1967.

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B.A. (1939), Prairie View. At Oregon since 1967.

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B.A. (1960), British Columbia; M.A. (1962), North Carolina. At Oregon since 1967.

*JANE GEHRING, M.S., Associate Professor of Art.

B.S. (1940), Michigan State Teachers (Ypsilanti); M.S. (1960), Oregon. At Oregon since 1958.

L. RICHARD GESER, Ph.D., Associate Professor of Physical Education.

B.S. (1951), M.S. (1952), Springfield (Mass.); Ph.D. (1965), Oregon. At Oregon since 1967.

KENNETH S. GHENT, Ph.D., Professor of Mathematics; Associate Dean of Students.

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B.A. (1957), Colorado. At Oregon since 1967.

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B.L.A. (1962), M.L.A. (1966), Oregon. At Oregon since 1967.

PHILIP C. GILMORE, M.F.A., Assistant Professor of Architecture.

B.Arch. (1948), M.F.A. (1956), Oregon. At Oregon since 1960.

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B.S. (1959), Tufts; M.S. (1963), Woman's College, North Carolina. At Oregon since 1964.

WALLACE G. GOBER, B.A., Instructor in English.

B.A. (1961), Southern Oregon. At Oregon since 1965.

* On leave of absence 1967-68.

- JEWEL H. GODDARD, M.S.W., Visiting Lecturer in Recreation.
B.A. (1951), M.S.W. (1955), California. At Oregon since 1967.
- LEWIS R. GOLDBERG, Ph.D., Associate Professor of Psychology.
A.B. (1953), Harvard; M.A. (1954), Ph.D. (1958), Michigan. At Oregon since 1960.
- KEITH GOLDSHAMMER, Ph.D., Professor of Education.
B.A. (1938), Reed; M.A. (1943), Ph.D. (1954), Oregon. At Oregon since 1956.
- DANIEL GOLDRICH, Ph.D., Professor of Political Science.
B.A. (1955), Antioch; M.A. (1957), Ph.D. (1959), North Carolina. At Oregon since 1963.
- LARRY G. GOLDSBOROUGH, B.A., Major, U.S. Air Force; Assistant Professor of Aerospace Studies.
B.A. (1956), California. At Oregon since 1967.
- HENRY N. GOLDSTEIN, Ph.D., Associate Professor of Economics.
B.A. (1950), North Carolina; M.A. (1953), Ph.D. (1967), Johns Hopkins. At Oregon since 1967.
- ROCHELLE C. GOLDSTEIN, M.A.T., Instructor in Education.
B.A. (1957), Kansas; M.A.T. (1960), Radcliffe. At Oregon since 1967.
- GORDON G. GOLES, Ph.D., Associate Professor of Chemistry and Geology.
B.A. (1956), Harvard; Ph.D. (1961), Chicago. At Oregon since 1966.
- PETER B. GONTRUM, Ph.D., Associate Professor of Germanic Languages.
A.B. (1954), Haverford; M.A. (1956), Princeton; Ph.D. (1958), Munich. At Oregon since 1961.
- NORMAN A. GOSCH, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1958), M.D. (1962), Nebraska. At Oregon since 1965.
- MARJORIE A. GOSS, M.A., Instructor in English.
B.A. (1950), Utah; M.A. (1961), Northwestern. At Oregon since 1965.
- DENNIS A. GOULD, B.S., Assistant Director (for Statewide Services), with the Rank of Instructor.
B.A. (1962), Oregon. At Oregon since 1967.
- THOMAS P. GOVAN, Ph.D., Professor of History.
B.S. (1928), Georgia Institute of Technology; M.A. (1934), Emory; Ph.D. (1937), Vanderbilt. At Oregon since 1967.
- *GRACE GRAHAM, Ed.D., Professor of Education.
B.A. (1933), M.A. (1936), South Carolina; Ed.D. (1952), Stanford. At Oregon since 1954.
- PHILIP GRANT, Ph.D., Professor of Biology.
B.S. (1947), College of City of New York; M.A. (1949), Ph.D. (1952), Columbia. At Oregon since 1966.
- RICHARD H. GRANT, M.P.H., Instructor in Health Education.
B.S. (1957), M.S. (1966), Oregon; M.P.H. (1967), Berkeley. At Oregon since 1967.
- JANE GRAY, Ph.D., Curator of Paleobotany, Museum of Natural History; Associate Professor of Biology.
B.A. (1951), Radcliffe; Ph.D. (1958), California. At Oregon since 1963.
- MARK R. GREENE, Ph.D., Professor of Insurance; Director, Center for International Business Studies.
A.B. (1947), M.B.A. (1949), Stanford; Ph.D. (1955), Ohio State. At Oregon 1949-52 and since 1955.
- MARVIN GREENBAUM, Ph.D., Adjunct Associate Professor of Psychology.
B.A. (1949), M.A. (1951), Ph.D. (1955), Syracuse. At Oregon since 1967.
- STANLEY B. GREENFIELD, Ph.D., Professor of English.
B.A. (1942), Cornell; M.A. (1947), Ph.D. (1950), California. At Oregon since 1959.
- THELMA GREENFIELD, Ph.D., Associate Professor of English.
B.A. (1944), M.A. (1947), Oregon; Ph.D. (1952), Wisconsin. At Oregon since 1961.

* On sabbatical leave, spring term, 1967-68.

- MONTE A. GREER, M.D., Professor of Medicine, Medical School; Head of Division of Endocrinology.
A.B. (1944), M.D. (1947), Stanford. At Oregon since 1956.
- BETTY GRIFFITH, M.S., Instructor in Physical Education.
B.S. (1959), Westminster; M.S. (1963), Southern Illinois. At Oregon since 1967.
- JOHN W. GRIFFITH, B.A., Instructor in English.
B.A. (1962), New Mexico. At Oregon since 1967.
- O. HAYES GRIFFITH, Ph.D., Assistant Professor of Chemistry.
A.B. (1960), California at Riverside; Ph.D. (1964), California Institute of Technology. At Oregon since 1965.
- HERBERT E. GRISWOLD, M.D., Professor of Medicine, Medical School; Head of Division of Cardiovascular Renal Diseases.
B.A. (1939), Reed; M.S. (1943), M.D. (1943), Oregon. At Oregon since 1949.
- JAMES H. GRITTON, M.A., Assistant Law Librarian; Assistant Professor of Library Administration.
B.C.S. (1950), J.D. (1953), Drake; M.A. (1966), Denver. At Oregon since 1966.
- *LARRY C. GROVE, Ph.D., Assistant Professor of Mathematics.
B.A. (1960), M.A. (1961), Ph.D. (1964), Minnesota. At Oregon since 1966.
- MYRON A. GROVE, Ph.D., Associate Professor of Economics.
B.S. (1957), M.S. (1959), Oregon; Ph.D. (1964), Northwestern. At Oregon since 1963.
- HAROLD E. GRUPE, D.D.S., Professor of Dentistry, Dental School; Head of Department of Periodontology.
D.D.S. (1932), Baylor. At Oregon since 1960.
- ELIZABETH GUNN, M.D., Acting Associate Director, Health Services, Tongue Point Job Corps Center, with the Rank of Instructor.
B.S. (1921), Washington; M.D. (1927), Oregon. At Oregon since 1967.
- MYRON A. GURAN, B.Arch., Assistant Professor of Architecture.
A.B. (1962), B.Arch. (1964), Pennsylvania. At Oregon since 1967.
- †PAUL E. GUSHWA, B.S., Major, U.S. Air Force; Assistant Professor of Aerospace Studies.
B.A. (1960), Florida State. At Oregon since 1964.
- *JOHN M. GUSTAFSON, Ph.D., Associate Professor of Music (Music Education).
A.B. (1947), Augustana; M.Mus. (1951), Michigan; Ph.D. (1956), Florida State. At Oregon since 1956.
- FRANKLIN B. HAAR, Ph.D., Professor of Health Education; Head of Department.
B.P.E. (1928), Springfield; M.A. (1933), Ph.D. (1946), Pittsburgh. At Oregon since 1949.
- PAUL J. HAAS, B.A., Assistant Supervisor of Instructional Media, Tongue Point Job Corps Center, with the Rank of Instructor.
B.A. (1930), Fordham. At Oregon since 1965.
- DEMETRIOS M. HADJIMARKOS, D.D.S., Professor of Dentistry, Dental School; Head of Department of Public Health Dentistry.
D.D.S. (1931), Athens; M.S.D. (1943), Northwestern; M.P.H. (1946), Harvard. At Oregon since 1953.
- DONALD R. HAGUE, Ph.D., Assistant Professor of Biology.
B.S. (1953), Franklin and Marshall, Ph.D. (1966), Oregon. At Oregon since 1966.
- WALTHER L. HAHN, Ph.D., Associate Professor of Germanic Languages.
Dip. (1949), Teachers College, Berlin; M.A. (1954), Rice; Ph.D. (1956), Texas. At Oregon since 1961.
- JOHN A. HAISLIP, Ph.D., Visiting Associate Professor of English.
B.A. (1950), Ph.D. (1967), Washington. At Oregon since 1966.

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- HENRY E. HALL, Ph.D., Visiting Professor of Physics.
B.A. (1952), Ph.D. (1956), Emmanuel. At Oregon since 1967.
- ROBERT C. HALL, Associate Professor Emeritus of Journalism.
At Oregon since 1917.
- RICHARD W. HALLER, Ph.D., Assistant Professor of Psychology; Research Associate, Statistical Laboratory and Computing Center.
B.A. (1963), Michigan State; Ph.D. (1968), Stanford. At Oregon since 1967.
- EDWARD T. HALLETT, M.A., Instructor in Speech; Production Manager, Division of Broadcast Services.
B.A. (1962), Central State (Okla.); M.A. (1966), Missouri. At Oregon since 1967.
- ROY K. HALVERSON, M.S., Assistant Professor of Journalism.
B.S. (1957), M.S. (1963), Wisconsin. At Oregon since 1966.
- JOHN HAMILTON, D.M.A., Associate Professor of Music (Organ, Harpsichord, Music History).
A.B. (1946), California; M.Mus. (1956), D.M.A. (1966), Southern California. At Oregon since 1959.
- PATRICIA S. HAMILTON, B.A., Instructor in English.
B.A. (1961), Nevada. At Oregon since 1966.
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- SUSANN G. HANDY, B.A., Instructor in English.
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- WILLIAM J. HANDY, Ph.D., Associate Professor of English; Associate Dean, College of Liberal Arts.
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- ARTHUR M. HANHARDT, JR., Ph.D., Assistant Professor of Political Science.
B.A. (1953), Rochester; M.A. (1958), Colgate; Ph.D. (1963), Northwestern. At Oregon since 1963.
- GLEN M. HANKINS, B.Ed., Adjunct Instructor in Education.
B.Ed. (1950), Oregon. At Oregon since 1967.
- WILLIAM S. HANNA, JR., Ph.D., Associate Professor of History; Head of Department.
A.B. (1949), M.A. (1954), Ph.D. (1959), California at Berkeley. At Oregon since 1965.
- FREDERICK T. HANNAFORD, B.A., Reg. Archt., Professor of Architecture.
B.A. (1924), Washington State; Reg. Archt. (1931), State of Florida. At Oregon since 1946.
- JOHN H. HANSEN, Ph.D., Associate Professor of Education.
B.S. (1959), M.S. (1961), Ph.D. (1964), Wisconsin. At Oregon since 1963.
- SALLY L. HANSEN, M.S., Adjunct Assistant Professor of Home Economics.
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- EDWARD C. HARMS, JR., B.S., LL.B., Special Lecturer in Law.
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- DONALD L. HARPER, M.S., Resident Supervisor, Tongue Point Job Corps Center, with the Rank of Instructor.
B.S. (1958), M.S. (1962), Colorado. At Oregon since 1966.
- MARGARET C. HARPER, M.L.S., Assistant Head Catalog Librarian; Assistant Professor of Library Administration.
B.A. (1960), Oberlin; M.L.S. (1961), Rutgers. At Oregon since 1966.
- LEO A. HARRIS, M.A., Consultant to the Athletic Director, with the Rank of Professor.
A.B. (1927), M.A. (1929), Stanford. At Oregon since 1947.

- ROBERT S. HARRIS, M.F.A., Professor of Architecture; Head of Department.
B.A. (1957), Rice; M.F.A. (1960), Princeton. At Oregon since 1967.
- DAVID K. HARRISON, Ph.D., Professor of Mathematics.
B.A. (1953), Williams; Ph.D. (1956), Princeton. At Oregon since 1963.
- EDITH C. HARRISON, B.A., Avocational Instructor, Tongue Point Job Corps Center.
B.A. (1961), Benedict. At Oregon since 1967.
- THOMAS R. HART, JR., Ph.D., Professor of Romance Languages.
B.A. (1948), Ph.D. (1952), Yale. At Oregon since 1964.
- DALE S. HARWOOD, JR., D.B.A., Associate Professor of Accounting.
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- ROBERT P. HASTINGS, M.A., Instructor in English.
B.A. (1960), Drew; M.A. (1961), Wisconsin. At Oregon since 1961.
- EMMANUEL S. HATZANTONIS, Ph.D., Associate Professor of Romance Languages.
B.A. (1952), College of City of New York; M.A. (1953), Columbia; Ph.D. (1958), California. At Oregon 1959-61 and since 1962.
- FREDERICK P. HAUGEN, M.D., Professor of Anesthesiology, Medical School; Head of Division.
B.A. (1933), M.D. (1935), Oregon. At Oregon since 1948.
- RAY HAWK, D.Ed., Professor of Education; Assistant to the President; Director of Federal Government Relations.
B.S. (1947), M.S. (1948), D.Ed. (1949), Oregon. At Oregon since 1950.
- ARTHUR W. HAWN, M.A., Assistant Professor of Interior Architecture.
B.A. (1961), M.A. (1964), Washington State. At Oregon since 1967.
- ROBERT L. HAWORTH, B.S., Visiting Lecturer in Recreation.
B.S. (1949), Idaho. At Oregon since 1967.
- WALLACE S. HAYDEN, B.Arch., Reg. Archt., Professor of Architecture.
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- *ARTHUR C. HEARN, Ed.D., Professor of Education.
A.B. (1934), M.A. (1937), Ed.D. (1949), Stanford. At Oregon since 1950.
- LINDA S. HEARN, M.A., Instructor in Physical Education.
B.S. (1962), M.A. (1965), Texas Woman's University. At Oregon since 1965.
- ROBERT L. HEILMAN, M.A., Computer Systems Development Programmer; Instructor in Mathematics.
B.S. (1962), Pittsburgh; M.A. (1964), Oregon. At Oregon since 1967.
- MERLE G. HELMS, B.S., Supervisor of General Education, Tongue Point Job Corps Center, with the Rank of Instructor.
B.S. (1959), Oregon College of Education. At Oregon since 1965.
- ALFRED HEILPERN, M.L., Acquisition Librarian; Senior Instructor in Library Administration.
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- JOSEPH T. HENKE, LL.B., Research Assistant, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
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- LEE C. HENRY, M.S., Instructor in Accounting.
B.S. (1964), M.S. (1966), Pennsylvania State. At Oregon since 1966.

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- EDWARD HERBERT, Ph.D., Associate Professor of Chemistry.
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- ROBERT T. HERBERT, Ph.D., Associate Professor of Philosophy.
B.A. (1952), M.A. (1954), Ph.D. (1962), Nebraska. At Oregon since 1966.
- WESLEY D. HERVEY, M.A., Instructor in Speech.
B.A. (1949), California at Santa Barbara; M.A. (1951), Hawaii. At Oregon since 1967.
- RICHARD J. HIGGINS, Ph.D., Assistant Professor of Physics.
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- EINAR HILLE, Ph.D., Visiting Professor of Mathematics.
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B.A. (1963), Washington; M.A. (1965), Oregon. At Oregon since 1967.
- CARL W. HINTZ, Ph.D., University Librarian; Professor of Librarianship.
A.B. (1932), De Pauw; A.B.L.S. (1933), A.M.L.S. (1935), Michigan; Ph.D. (1952), Chicago. At Oregon since 1948.
- KENNETH HIRSCH, A.M., Instructor, Division of Broadcast Services.
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- ROGER W. HITE, M.S., Instructor in Speech.
B.A. (1966), Hayward (Calif.); M.S. (1967), Oregon. At Oregon since 1967.
- ERNEST H. HIXON, D.D.S., Professor of Dentistry, Dental School; Head of Department of Orthodontics.
D.D.S. (1945), Iowa State; M.S. (1949), Iowa; At Oregon since 1961.
- J. ROBERT HLADKY, A.Mus.D., Professor of Music (Violoncello, Music History); Member, University Trio.
B.Mus. (1950), Oklahoma State; M.Mus. (1952), A.Mus.D. (1959), Eastman School of Music. At Oregon since 1961.
- KATHLEEN G. HOBBS, B.A., Instructor in General Education, Tongue Point Job Corps Center.
B.A. (1966), Eastern Washington. At Oregon since 1967.
- GEORGE M. HODGE, JR., M.S., Professor of Architecture; Assistant to the Dean of the School of Architecture and Allied Arts.
B.S. (1949), M.S. (1950), Illinois. At Oregon since 1964.
- CLARENCE V. HODGES, M.D., Professor of Urology, Medical School; Head of Division.
B.S. (1937), Iowa State; M.D. (1940), Chicago. At Oregon since 1948.
- DANIEL L. HODGES, B.A., Instructor in Sociology.
B.A. (1961), Colby College. At Oregon since 1966.
- HUBERT H. HOELTJE, Ph.D., Professor Emeritus of English.
B.A. (1919), M.A. (1926), Ph.D. (1932), Iowa. At Oregon since 1947.
- EUGENE A. HOERAUF, B.S., Map Room Assistant; Adjunct Instructor in Library Administration.
B.S. (1965), Oregon. At Oregon since 1967.
- EUGENE J. HOGAN, M.A., Academic Adviser, with the Rank of Instructor.
B.A. (1958), Gonzaga; M.A. (1964), Georgetown. At Oregon since 1964.

- PAUL S. HOLBO, Ph.D., Associate Professor of History.
B.A. (1951), Yale; M.A. (1955), Ph.D. (1961), Chicago. At Oregon since 1959.
- HAZEL E. HOLBOKE, M.Ed., Senior Instructor in Education.
B.S. (1951), Oregon College of Education; M.Ed. (1957), Oregon. At Oregon since 1962.
- BETTY J. HOLDEN, Resident Adviser, Tongue Point Job Corps Center, with the Rank of Instructor.
At Oregon since 1967.
- DAVID M. HOLLENBACK, B.A., Instructor in Communication Skills, Tongue Point Job Corps Center.
B.A. (1957), Chico State. At Oregon since 1966.
- ORLANDO J. HOLLIS, B.S., J.D., Distinguished Professor of Law.
B.S. (1926), J.D. (1928), Oregon. At Oregon since 1928.
- JACK C. HOLLISTER, M.S., Adjunct Instructor in Education.
B.S. (1949), M.S. (1959), Oregon State. At Oregon since 1967.
- CHARLES N. HOLMAN, M.D., Associate Dean of the Medical School; Medical Director and Administrator of Hospitals and Clinics; Professor of Medicine.
B.A. (1931), M.D. (1936), Oregon. At Oregon since 1937.
- RAYMOND W. HONERLAH, M.A., Academic Adviser, with the Rank of Instructor.
B.A. (1962), Willamette; M.A. (1964), Oregon. At Oregon since 1967.
- GEORGE HOPKINS, B.A., Professor Emeritus of Piano.
Teachers Cert. (1918), Peabody Conservatory; B.A. (1921), Oregon. At Oregon 1919-23 and since 1925.
- ROBERT D. HORN, Ph.D., Professor of English.
B.A. (1922), M.A. (1924), Ph.D. (1930), Michigan. At Oregon since 1925.
- MARY I. HOSKINS, Resident Adviser, Tongue Point Job Corps Center, with the Rank of Instructor.
At Oregon since 1967.
- MICHAEL C. HOSOKAWA, M.Ed., Instructor in Health Education.
B.A. (1962), Colorado State; M.Ed. (1963), Oregon State. At Oregon since 1967.
- JAMES M. HOTCHKISS, Ph.D., Assistant Professor of Education.
B.A. (1953), Wichita; Ph.D. (1966), Southern California. At Oregon since 1966.
- THOMAS HOVET, JR., Ph.D., Professor of Political Science.
A.B. (1948), Washington; M.A. (1949), New York University; Ph.D. (1954), New Zealand. At Oregon since 1965.
- CHARLES G. HOWARD, A.B., J.D., Professor Emeritus of Law.
A.B. (1920), J.D. (1922), Illinois. At Oregon since 1928.
- JOHN R. HOWARD, Ph.D., Assistant Professor of Sociology.
B.A. (1955), Brandeis; M.A. (1961), New York University; Ph.D. (1965), Stanford. At Oregon since 1964.
- ROSALIE D. HOWARD, M.Ed., Counselor, University Counseling Center, with the Rank of Instructor.
B.S. (1962), Idaho; M.Ed. (1965), Oregon. At Oregon since 1965.
- *GRAHAM HOYLE, D.Sc., Professor of Biology.
B.Sc. (Chemistry, Physics) (1944), B.Sc. (Zoology, Botany) (1950), London; D.Sc. (1955), Glasgow. At Oregon since 1962.
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B.A. (1961), M.A. (1966), Chicago. At Oregon since 1966.
- ESTHER J. LEONG, M.A., Visiting Lecturer in Art History.
B.A. (1962), M.A. (1964), Chicago. At Oregon since 1966.
- WOLFGANG A. LEPPMANN, Ph.D., Professor of Germanic Languages; Head, Department of German and Russian.
B.A. (1948), M.A. (1949), McGill; Ph.D. (1952), Princeton. At Oregon since 1954.
- ESTHER H. LESER, B.A., Instructor in German.
Dipl. (1944), Sacré-Coeur; B.A. (1960), Marylhurst. At Oregon since 1965.
- DON S. LEVI, Ph.D., Assistant Professor of Philosophy.
B.A. (1956), Wisconsin; M.A. (1961), Ph.D. (1964), Harvard. At Oregon since 1964.
- PETER M. LEWINSOHN, Ph.D., Associate Professor of Psychology.
B.S. (1951), Allegheny; M.A. (1953), Ph.D. (1955), Johns Hopkins. At Oregon since 1965.
- GENE R. LEWIS, M.M., M.A., Assistant Professor of Music (Brass Instruments, Music Education).
B.M. (1954), Texas Western; M.M. (1958), Manhattan School of Music; Prof. Dip., M.A. (1960), Columbia. At Oregon since 1965.

- HOWARD P. LEWIS, M.D., Dr. Laurence Selling Professor of Medicine, Medical School; Chairman of Department.
B.S. (1924), Oregon State; M.D. (1930), Oregon. At Oregon since 1932.
- PAUL M. LEWIS, M.A., Lecturer in Romance Languages; Assistant University Editor, with the Rank of Assistant Professor.
B.J. (1948), Missouri; M.A. (1961), Oregon. At Oregon since 1966.
- EDWARD LICHTENSTEIN, Ph.D., Associate Professor of Psychology.
B.A. (1956), Duke; M.A. (1957), Ph.D. (1961), Michigan. At Oregon since 1966.
- MARVIN E. LICKEY, Ph.D., Assistant Professor of Psychology.
B.A. (1959), Oberlin; M.A. (1962), Ph.D. (1964), Michigan. At Oregon since 1966.
- *HANS A. LINDE, LL.B., Professor of Law.
B.A. (1947), Reed; LL.B. (1950), California. At Oregon 1954 and since 1959.
- RICHARD W. LINDHOLM, Ph.D., Dean of the College of Business Administration; Professor of Finance.
A.B. (1935), Gustavus Adolphus; M.A. (1938), Minnesota; Ph.D. (1942), Texas. At Oregon since 1958.
- DONALD D. LINDLEY, M.Ed., Visiting Lecturer in Recreation.
B.A. (1949), Wichita State; M.Ed. (1952), Minnesota. At Oregon since 1966.
- HOWARD A. LINDSTROM, M.A., Assistant Head, Audiovisual Media Center, Library; Assistant Professor of Library Administration.
B.S. (1957), Southern Oregon; M.A. (1966), San Jose State. At Oregon since 1966.
- J. ORVILLE LINDSTROM, B.S., Director of Fiscal Affairs, with the Rank of Professor.
B.S. (1932), Oregon. At Oregon since 1932.
- CHESTER B. LIPSCOMB, Food Manager, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1966.
- ARTHUR P. LITCHMAN, Director of Public Relations and Promotion, Athletic Department, with the Rank of Associate Professor.
At Oregon since 1946.
- RICHARD A. LITTMAN, Ph.D., Professor of Psychology; Head of Department.
A.B. (1943), George Washington; Ph.D. (1948), Ohio State. At Oregon since 1948.
- WALTER C. LOBITZ, JR., M.D., Professor of Dermatology, Medical School; Head of Division.
B.S. (1939), B.M. (1940), M.D. (1941), Cincinnati. At Oregon since 1959.
- ROBERT R. LOCKARD, M.A., Social Science Librarian; Senior Instructor in Library Administration.
B.A. (1952), Colorado State College of Education; M.A. (1956), Denver. At Oregon since 1961.
- ROBIN B. LODIEWICK, M.L.S., Catalog Librarian; Instructor in Library Administration.
B.A. (1959), Brooklyn; M.L.S. (1961), Rutgers. At Oregon since 1961.
- HENRY L. LOEB, Ph.D., Visiting Associate Professor of Mathematics.
B.S. (1949), Wisconsin; M.A. (1958), Columbia; Ph.D. (1965), California at Los Angeles. At Oregon since 1966.
- FRANCISCO LOERA, Adjunct Instructor in Education.
At Oregon since 1967.
- FRANK H. LOGGAN, B.A., Lecturer in Journalism.
B.A. (1926), Oregon. At Oregon since 1966.
- ALFRED L. LOMAX, M.A., Professor Emeritus of Business Administration.
B.B.A. (1923), Oregon; M.A. (1927), Pennsylvania. At Oregon since 1919.

* On sabbatical leave 1967-68.

- AVARD C. LONG, M.D., C.M., Assistant Director, Student Health Service; Associate University Physician, with the Rank of Professor.
B.Sc. (1938), New Hampshire; M.Sc. (1940), Cornell; M.D., C.M. (1944), McGill. At Oregon since 1965.
- RICHARD J. LONG, M.S., Reference Librarian; Instructor in Library Administration.
B.S. (1949), Pennsylvania State; M.S. (1966), Oregon. At Oregon since 1966.
- VAL R. LORWIN, Ph.D., Professor of History.
B.A. (1927), Ph.D. (1953), Cornell; M.A. (1929), Ohio State. At Oregon since 1957.
- EMANUEL LOTITO, B.A., Resident Counselor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.A. (1949), Sacred Heart. At Oregon since 1966.
- JOHN W. LOUGHARY, Ph.D., Professor of Education.
B.S. (1952), Oregon; M.A. (1956), Ph.D. (1958), Iowa. At Oregon 1962-64, and since 1965.
- JESSIE J. LOVANO, M.A., Visiting Instructor in Art Education.
B.S. (1952), M.A. (1956), Ohio State. At Oregon since 1967.
- GLEN A. LOVE, Ph.D., Assistant Professor of English; Director of English Composition.
B.A. (1954), M.A. (1959), Ph.D. (1964), Washington. At Oregon since 1965.
- CHERYL J. LOVELL, Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1967.
- *LLOYD L. LOVELL, Ph.D., Associate Professor of Education.
B.A. (1947), Lawrence; M.S. (1951), Minnesota; Ph.D. (1955), Cornell. At Oregon since 1959.
- RONALD J. LOVINGER, M.L.A., Assistant Professor of Landscape Architecture.
B.F.A. (1961), Illinois; M.L.A. (1963), Pennsylvania. At Oregon since 1965.
- RAYMOND N. LOWE, Ed.D., Professor of Education.
B.S.Ed. (1940), Massachusetts State (Fitchburg); M.A. (1948), Ed.D. (1951), Northwestern. At Oregon since 1955.
- FRANKLIN LOWENTHAL, Ph.D., Assistant Professor of Mathematics.
B.S. (1959), City College of New York; M.S. (1962), Ph.D. (1965), Stanford. At Oregon since 1965.
- WILLIAM G. LOY, Ph.D., Assistant Professor of Geography.
B.A. (1958), Minnesota; M.S. (1962), Chicago; Ph.D. (1967), Minnesota. At Oregon since 1967.
- KUO HWA LU, Ph.D., Professor of Biostatistics, Dental School; Head of Department.
B.S. (1945), National Central University, Chungking; M.S. (1948), Ph.D. (1951), Minnesota. At Oregon since 1960.
- KAREN E. LUDLOW, B.S., Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1965), Texas Women's University. At Oregon since 1967.
- ERNEST H. LUND, Ph.D., Associate Professor of Geology.
B.S. (1944), Oregon; Ph.D. (1950), Minnesota. At Oregon since 1957.
- REGINA A. LUNDERGAN, B.A., Instructor in English.
B.A. (1965), Southern Oregon. At Oregon since 1967.
- GERALD H. LUNDY, M.S., Instructor in English.
B.A. (1950), M.S. (1958), Oregon. At Oregon since 1964.
- CHRIS J. LUNESKI, Ph.D., Associate Professor of Accounting and Business Statistics.
A.B. (1956), Johns Hopkins; M.A. (1959), Ph.D. (1965), Minnesota. At Oregon since 1961.

* On sabbatical leave 1967-68.

- ARTHUR E. MACE, Ph.D., Professor of Business Statistics.
B.A. (1938), Amherst; Ph.D. (1947), Chicago. At Oregon since 1964.
- JOHN MACGREGOR, Ph.D., Assistant Professor of Sociology.
B.A. (1961), Maine; Ph.D. (1966), Cornell. At Oregon since 1965.
- KENNETH H. MACKINTOSH, M.A., Academic Adviser, Office of Academic Advising, with the Rank of Instructor.
B.A. (1963), San Francisco State; M.A. (1967), Oregon. At Oregon since 1967.
- JACK P. MADDEX, JR., Ph.D., Assistant Professor of History.
B.A. (1963), Princeton; Ph.D. (1966), North Carolina. At Oregon since 1966.
- BRUNO V. MADRID, M.Mus., Instructor in Physical Education.
B.Mus. (1955), Santo Tomas; M.Mus. (1963), Oregon. At Oregon since 1966.
- GLENN A. MADSEN, M.A., Instructor in Education.
B.S. (1958), Northern Montana; M.A. (1962), San Francisco State. At Oregon since 1967.
- NORBERT W. MAERTENS, M.A., Acting Assistant Professor of Education.
B.S. (1958), Mankato State; M.A. (1960), Minnesota. At Oregon since 1967.
- GERALD D. MAHAN, Ph.D., Assistant Professor of Physics; Research Associate, Institute of Theoretical Science.
A.B. (1959), Harvard; Ph.D. (1964), California. At Oregon since 1967.
- PETER A. MAHER, B.A., Resident Supervisor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.A. (1961), Walla Walla. At Oregon since 1966.
- DAVID B. MAHLER, Ph.D., Professor of Dental Materials, Dental School; Head of Department.
B.S. (1944), M.S. (1948), Ph.D. (1956), Michigan. At Oregon since 1956.
- JUDITH I. MAHLER, B.A., Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
B.A. (1964), Washington. At Oregon since 1967.
- *EUGENE A. MAIER, Ph.D., Associate Professor of Mathematics.
B.A. (1950), M.A. (1951), Ph.D. (1954), Oregon. At Oregon since 1961.
- STODDARD MALARKEY, Ph.D., Assistant Professor of English.
A.B. (1955), Reed; M.Ed. (1960), Oregon State; Ph.D. (1964), Oregon. At Oregon 1961-64, and since 1965.
- †O. M. PRAKASH MALHOTRA, Ph.D., Visiting Associate Professor of Chemistry; Research Associate, Institute of Molecular Biology.
B.S. (1949), M.S. (1951), Punjab; Ph.D. (1959), Banaras Hindu University. At Oregon since 1966.
- MARK J. MALINAUSKAS, M.A., Instructor in Speech.
B.A. (1961), King's College (Pa.); M.A. (1962), New Mexico Highlands University. At Oregon since 1967.
- GREGORY P. MALTBY, Ed.D., Assistant Professor of Education.
B.S. (1955), M.S. (1956), Illinois State; Ed.D. (1966), Illinois. At Oregon since 1966.
- DOROTHY M. MANNING, M.L., Catalog Librarian; Instructor in Library Administration.
B.S. in Ed. (1948), New York College of Education (Buffalo); M.L. (1963), Washington. At Oregon since 1963.
- THOMAS W. MAPP, LL.B., Associate Professor of Law; Acting Associate Dean of the School of Law.
B.A. (1950), Rochester; LL.B. (1956), Illinois. At Oregon since 1964.
- SAMUEL L. MARGULIES, M.A., Instructor in Education.
B.A. (1964), M.A. (1966), New York University. At Oregon since 1967.

* On sabbatical leave, winter and spring terms, 1967-68.

† Resigned Jan. 31, 1968.

- MARGARET MARKLEY, A.B., B.S. in L.S., Senior Catalog Librarian; Assistant Professor of Library Administration.
A.B. (1933), Southwest Missouri State; B.S. in L.S. (1941), Illinois. At Oregon since 1945.
- ELISABETH A. MARLOW, Ph.D., Assistant Professor of Romance Languages.
Diplôme (1953), Ecole de Hautes Etudes Commerciales (Paris); M.A. (1958), Ph.D. (1966), Oregon. At Oregon since 1958.
- *THOMAS E. MARSHALL, Ph.D., Associate Professor of Romance Languages.
B.A. (1945), M.A. (1946), Ph.D. (1959), California. At Oregon since 1953.
- GARY M. MARTIN, Ph.D., Assistant Professor of Music (Music Education, Music History).
B.A. (1961), M.A. (1963), Adams State College; Ph.D. (1965), Oregon. At Oregon since 1966.
- GENE E. MARTIN, Ph.D., Associate Professor of Geography.
B.A. (1949), M.A. (1952), Washington; Ph.D. (1955), Syracuse. At Oregon since 1956.
- GLORIA H. MARTIN, Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1967.
- WALTER T. MARTIN, Ph.D., Professor of Sociology; Head of Department.
B.A. (1943), M.A. (1947), Ph.D. (1949), Washington. At Oregon since 1947.
- MELTON C. MARTINSON, Ph.D., Assistant Professor of Education.
B.S. (1953), River Falls (Wisconsin); M.S. (1960), Ph.D. (1965), Wisconsin. At Oregon since 1965.
- MARIE R. MASON, M.A., Senior Instructor in Mathematics.
B.A. (1921), Oregon; M.A. (1929), Columbia. At Oregon since 1943.
- JOSEPH D. MATARAZZO, Ph.D., Professor of Medical Psychology, Medical School; Chairman of Department.
B.A. (1946), Brown; M.S. (1950), Ph.D. (1952), Northwestern. At Oregon since 1957.
- WILLIAM R. MATSLER, M.S., Visiting Lecturer in Recreation.
B.L.A. (1946), M.S. (1962), Oregon. At Oregon since 1967.
- THEODORE K. MATTHES, Ph.D., Associate Professor of Mathematics.
B.S. (1955), California Institute of Technology; Ph.D. (1960), Columbia. At Oregon since 1962.
- ESTHER E. MATTHEWS, Ed.D., Associate Professor of Education.
B.S. (1940), Massachusetts State; M.Ed. (1943), Ed.D. (1960), Harvard. At Oregon since 1966.
- FRED A. MATTHIAS, B.B.A., Business Manager, Medical School, (Associate Professor).
B.B.A. (1949), Oregon. At Oregon since 1956.
- JAMES M. MATTIS, J.D., Legal Assistant, Bureau of Governmental Research and Service, with the Rank of Instructor.
B.A. (1964), Central Washington State; J.D. (1967), Washington. At Oregon since 1967.
- ROBERT H. MATTSON, D.Ed., Associate Professor of Education; Chairman of Special Education; Assistant Director, Division of Psycho-Educational Studies, with the Rank of Professor.
B.A. (1949), Montana; M.A. (1950), Iowa; D.Ed. (1959), Oregon. At Oregon since 1957.
- STANLEY R. MAVEETY, Ph.D., Associate Professor of English.
B.S. (1943), Northwestern; M.A. (1950), Columbia; Ph.D. (1956), Stanford. At Oregon since 1955.
- LAWRENCE C. MAVES, JR., M.Mus., Associate Professor of Music (Violin, Music Theory).
B.Mus. (1954), M.Mus. (1959), Oregon; Diploma (1958), Juilliard School of Music. At Oregon since 1958.

* On leave of absence 1967-68.

- ROBERT M. MAZO, Ph.D., Professor of Chemistry; Associate Dean of the Graduate School; Research Associate, Institute of Theoretical Science.
B.A. (1952), Harvard; M.S. (1953), Ph.D. (1955), Yale. At Oregon since 1962.
- HAROLD V. MCABEE, D.Ed., Assistant Professor of Education; Deputy Director, Tongue Point Job Corps Center, with the Rank of Professor.
A.B. (1943), Willamette; M.Ed. (1950), Washington; B.S. (1952), Southern Oregon; D.Ed. (1957), Oregon. At Oregon since 1965.
- ALEXANDER R. MCBIRNEY, Ph.D., Associate Professor of Geology.
B.S. (1946), U.S. Military Academy (West Point); Ph.D. (1961), California at Berkeley. At Oregon since 1965.
- FRANKLIN L. MCCARTHY, M.B.A., Acting Assistant Professor of Accounting.
A.B. (1959), Hope College; M.B.A. (1962), Chicago. At Oregon since 1967.
- IAN E. MCCARTHY, Ph.D., Professor of Physics; Research Associate, Institute of Theoretical Science.
B.S. (1951), Ph.D. (1955), University of Adelaide (Australia). At Oregon since 1965.
- ROGER C. MCCLAIN, M.A., Psychiatric Social Worker, with the Rank of Instructor, Tongue Point Job Corps Center.
B.A. (1959), Portland; M.A. (1962), Notre Dame. At Oregon since 1966.
- *JOEL W. MCCLURE, JR., Ph.D., Professor of Physics.
B.S. (1949), M.S. (1951), Northwestern, Ph.D. (1954), Chicago. At Oregon 1954-56 and since 1961.
- DIANNA R. MCCOLL, M.Ed., Resident Supervisor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.Ed. (1961), British Columbia; M.Ed. (1965), Oregon. At Oregon since 1967.
- RUSSEL E. MCCOLLISTER, B.A., Instructor in Communication Skills, Tongue Point Job Corps Center.
B.A. (1960), Southern Oregon. At Oregon since 1965.
- ROBERT R. MCCOLLOUGH, M.A., M.S., Head Humanities Librarian; Associate Professor of Librarianship.
B.A. (1940), M.A. (1942), Wyoming; M.S. (1950), Columbia. At Oregon since 1950.
- BAYARD H. MCCONNAUGHEY, Ph.D., Associate Professor of Biology; Site Director, Marine Biology Station.
B.A. (1938), Pomona; M.A. (1941), Hawaii; Ph.D. (1948), California. At Oregon since 1948.
- DAVID J. MCCOSH, Professor of Art.
Grad. (1927), Art Institute of Chicago. At Oregon since 1934.
- REYBURN R. MCCREADY, M.A., Reference Librarian; Senior Instructor in Library Administration.
B.A. (1950), John Brown; M.A. (1961), Denver. At Oregon since 1961.
- DAVID K. MCDANIELS, Ph.D., Associate Professor of Physics.
B.S. (1951), Washington State; M.S. (1958), Ph.D. (1960), Washington. At Oregon since 1963.
- JUNE K. MCFEE, Ed.D., Associate Professor of Art Education; Director, Institute for Community Art Studies.
B.A. (1939), Washington; M.Ed. (1954), Central Washington; Ed.D. (1957), Stanford. At Oregon since 1965.
- MALCOLM MCFEE, Ph.D., Assistant Professor of Anthropology.
B.A. (1956), San Jose State; M.A. (1958), Ph.D. (1962), Stanford. At Oregon since 1965.
- DONALD F. MCGAVERN, M.S., Instructor in Physical Education.
B.A. (1964), Oklahoma Baptist; M.S. (1966), Oregon. At Oregon since 1967.
- MARGARET A. MCHUGH, M.A., Head Resident, Dormitories, with the Rank of Instructor.
B.A. (1942), Utah; M.A. (1964), Idaho State. At Oregon since 1967.

* On sabbatical leave 1967-68.

PHILIP I. MCHUGH, B.S., Instructor in Physical Education; Assistant Football Coach, with the Rank of Assistant Professor.
B.S. (1957), Oregon. At Oregon since 1958.

A. DEAN MCKENZIE, Ph.D., Associate Professor of History of Art.
B.A. (1952), San Jose State; M.A. (1955), California; Ph.D. (1965), New York University. At Oregon since 1966.

LORAIN MCKENZIE, B.A., Instructor in Home Economics.
B.A. (1947), Washington State. At Oregon since 1967.

HERMAN L. MCKINNEY, Avocational Manager, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1966.

WALTER N. McLAUGHLIN, B.S., C.P.A., Business Manager, with the Rank of Professor.
B.S. (1949), Oregon; C.P.A. (1954), State of Oregon. At Oregon since 1954.

JOHN C. McMANUS, M.A., Assistant Professor of Music (Clarinet, Music Education).
B.M.E. (1943), Northwestern; M.A. (1950), Columbia. At Oregon since 1967.

ADELL McMILLAN, M.S., Assistant Director for Programs, Erb Memorial Union, with the Rank of Assistant Professor.
B.A. (1955), Whitman; M.S. (1963), Oregon. At Oregon since 1955.

*CORINNE C. McNEIR, M.S. in L.S., Documents Librarian; Assistant Professor of Library Administration.
B.A. (1930), Rice; M.S. in L.S. (1957), Louisiana State. At Oregon since 1961.

†WALDO F. McNEIR, Ph.D., Professor of English.
B.A. (1929), Rice; M.A. (1932), Ph.D. (1940), North Carolina. At Oregon since 1961.

RICHARD D. McQUEEN, M.A., Counselor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1961), M.A. (1965), Oregon. At Oregon since 1965.

JAMES J. McWHIRTER, M.Ed., Instructor in Community Activities, Tongue Point Job Corps Center.
B.A. (1961), St. Martin's; M.Ed. (1964), Oregon; M.Ed. (1965), Oregon State. At Oregon since 1966.

DAVID D. McWILLIAMS, B.A., Instructor in English.
B.A. (1962), St. Mary's; Dip. (1964), University of Paris. At Oregon since 1967.

‡JAMES R. McWILLIAMS, Ph.D., Assistant Professor of Germanic Languages.
B.A. (1951), M.A. (1957), Ph.D. (1963), California. At Oregon since 1960.

PAUL B. MEANS, Ph.D., Professor Emeritus of Religion.
B.A. (1915), Yale; B.Litt. (1923), Oxford; Ph.D. (1935), Columbia. At Oregon since 1941.

NORMAN D. MEINKE, M.F.A., Instructor in English.
B.A. (1959), M.A. (1962), San Francisco State; M.F.A. (1967), Oregon. At Oregon since 1966.

JOHN R. MENNINGER, Ph.D., Assistant Professor of Biology; Research Associate, Institute of Molecular Biology.
B.A. (1957), Ph.D. (1964), Harvard. At Oregon since 1966.

EILEEN T. MERCER, Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1967.

GERTRUDE J. MERIWETHER, M.Ed., Psychologist, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1934), Wilberforce; B.S. (1938), Washington; M.Ed. (1964), Western Washington State. At Oregon since 1966.

* On sabbatical leave, spring term, 1967-68.

† On sabbatical leave, winter and spring terms, 1967-68.

‡ On sabbatical leave 1967-68.

- JIMMIE D. MERRILL, M.S., Supervisor of Reading and Study Skills Laboratory, University Counseling Center, with the Rank of Instructor.
B.S. (1956), M.S. (1962), Brigham Young. At Oregon since 1967.
- LEROY C. MERRITT, Ph.D., Dean of the School of Librarianship; Professor of Librarianship.
B.A. (1935), Wisconsin; Ph.D. (1942), Chicago. At Oregon since 1966.
- ROBERT J. MERTZ, Ph.D., Assistant Professor of Speech; Media Research Director.
B.A. (1960), M.A. (1962), Oregon; Ph.D. (1966), Michigan State. At Oregon since 1966.
- KENNETH T. METZLER, B.S., Editor, Old Oregon, with the Rank of Associate Professor; Assistant Professor of Journalism.
B.S. (1956), Oregon. At Oregon since 1960.
- MARY CLAIRE MEYER, M.A., Head Circulation Librarian; Assistant Professor of Library Administration.
B.A. (1959), M.A. (1961), Minnesota. At Oregon since 1961.
- JOHN P. MICHAEL, B.A., Instructor in Education.
B.A. (1960), Wisconsin. At Oregon since 1966.
- RAYMOND F. MIKESSELL, Ph.D., W. E. Miner Professor of Economics.
B.A. (1935), M.A. (1935), Ph.D. (1939), Ohio State. At Oregon since 1957.
- ALPHONSE K. MIKSIS, M.A., Resident Counselor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1949), Western Illinois; M.A. (1959), Colorado State. At Oregon since 1965.
- MARK T. MILLEMAN, M.S., Instructor in Education.
B.S. (1966), M.S. (1967), Oregon. At Oregon since 1967.
- FRED N. MILLER, M.D., Professor Emeritus of Health Education.
B.A. (1914), M.A. (1916), Lafayette; M.D. (1924), Chicago. At Oregon since 1925.
- FREDERICK K. MILLER, M.A., Instructor in Speech.
B.S. (1940), Wisconsin; M.A. (1949), Northwestern. At Oregon since 1967.
- JAMES A. MILLER, A.Mus.D., Assistant Professor of Music (Voice); Director, Opera Workshop.
B.A. (1952), Goshen; M.Mus. (1956), A.Mus.D. (1963), Michigan. At Oregon since 1965.
- JAMES H. MILLER, Orientation Staff Assistant, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1967.
- JUANITA J. MILLER, Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1967.
- MARIAN H. MILLER, M.D., Associate University Physician, with the Rank of Professor.
B.A. (1925), M.D. (1930), Oregon. At Oregon since 1931.
- NETTIE B. MILLER, B.S., Instructor in General Education, Tongue Point Job Corps Center.
B.S. (1941), Texas State College for Women. At Oregon since 1967.
- STEVE MILLER, Health Service Administrator, with the Rank of Instructor, Tongue Point Job Corps Center.
At Oregon since 1966.
- SUSAN J. MILLER, M.Ed., Senior Instructor in Education.
B.S. (1955), M.Ed. (1962), Oregon. At Oregon since 1962.
- THOMAS J. MILLS, M.S., Assistant Dean of Students, International Students, with the Rank of Assistant Professor.
B.A. (1963), Washington State; M.S. (1967), Oregon. At Oregon since 1967.
- EDWARD MILOWICKI, M.A., Instructor in English.
B.A. (1958), Wilkes; M.A. (1962), Duquesne. At Oregon since 1963.

*JOHN B. MINER, Ph.D., Professor of Management.

A.B. (1950), Ph.D. (1955), Princeton; M.A. (1952), Clark. At Oregon since 1960.

RALPH E. MINER, M.A., Research Associate, President's Office, with the Rank of Associate Professor.

B.A. (1950), San Jose State; M.A. (1961), Oregon. At Oregon since 1964.

JOYCE M. MITCHELL, Ph.D., Assistant Professor of Political Science.

B.A. (1952), Pomona; M.A. (1954), California at Los Angeles; Ph.D. (1964), California. At Oregon since 1960.

WILLIAM C. MITCHELL, Ph.D., Professor of Political Science.

B.A. (1950), Michigan State; M.A. (1951), Illinois; Ph.D. (1960), Harvard. At Oregon since 1960.

ARTHUR MITTMAN, Ph.D., Professor of Education.

B.A. (1947), M.S. (1950), Ph.D. (1958), Iowa. At Oregon since 1963.

FRED J. MOHR, B.A., Deputy Director, Office of Scientific and Scholarly Research, with the Rank of Assistant Professor.

B.A. (1956), Oregon. At Oregon since 1962.

ERNEST G. MOLL, A.M., Professor Emeritus of English.

A.B. (1922), Lawrence; A.M. (1923), Harvard. At Oregon since 1928.

WILLIAM MONTAGNA, Ph.D., D.Sc., Professor of Experimental Biology, Medical School; Head of Division.

B.A. (1936), Ph.D. (1944), Cornell; D.Sc. (1960), Bethany. At Oregon since 1963.

KIRT E. MONTGOMERY, Ph.D., Associate Professor of Speech.

A.B. (1930), Carroll; M.A. (1939), Ph.D. (1948), Northwestern. At Oregon 1941-43 and since 1945.

CARLISLE MOORE, Ph.D., Professor of English.

B.A. (1933), M.A. (1934), Ph.D. (1940), Princeton. At Oregon since 1946.

JOSEPHINE S. MOORE, B.S., Manager of News Bureau, with the Rank of Assistant Professor.

B.S. (1931), Oregon. At Oregon since 1946.

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B.A. (1925), Willamette; M.S. (1948), Oregon. At Oregon since 1946.

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B.A. (1958), Texas; M.A. (1962), Washington. At Oregon since 1964.

- WENDELL H. STEPHENSON, Ph.D., Litt.D., LL.D., Professor of History; Special Assistant to the President.
A.B. (1923), A.M. (1924), Indiana; Ph.D. (1928), Michigan; Litt.D. (1950), Duke; LL.D. (1953), North Carolina. At Oregon since 1953.
- THEODORE STERN, Ph.D., Professor of Anthropology; Assistant Curator of Ethnology.
B.A. (1939), Bowdoin; A.M. (1941), Ph.D. (1948), Pennsylvania. At Oregon since 1948.
- FRED L. STETSON, M.A., Professor Emeritus of Education.
B.A. (1911), M.A. (1913), Washington. At Oregon since 1913.
- CHRISTIAN D. STEVENS, M.A., Instructor in English.
B.A. (1951), Great Falls; M.A. (1954), Edinburgh. At Oregon since 1967.
- KAY L. STEWART, B.A., Instructor in English.
B.A. (1965), Texas Technological College. At Oregon since 1967.
- ARTHUR B. STILLMAN, M.B.A., Professor Emeritus of Business Administration.
B.A. (1928), Oregon; M.B.A. (1937), Washington. At Oregon since 1922.
- THOMAS M. STIPEK, Ph.D., Instructor in Education.
B.Ed. (1960), Seattle; M.Ed. (1963), Portland; Ph.D. (1967), Oregon. At Oregon since 1967.
- CHARLES A. STOLSIG, M.S., Resident Supervisor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1958), M.S. (1960), Oregon. At Oregon since 1965.
- NONDA P. STONE, M.Ed., Instructor in Education; Director of Practicum Program, with the Rank of Instructor.
B.S. (1945), Oregon College of Education; M.Ed. (1955), Oregon. At Oregon since 1965.
- CHARLES J. STOUT, D.M.D., Professor of Dentistry, Dental School; Head of Department of Prosthetics.
B.S. (1943), Ouachita; B.A. (1947), D.M.D. (1947), Oregon. At Oregon since 1955.
- *JAMES C. STOVALL, M.A., Professor of Geology.
B.S. (1927), M.A. (1929), Oregon. At Oregon since 1934.
- WILLIAM C. STRANGE, Ph.D., Associate Professor of English.
B.A. (1952), Whitman; M.A. (1953), Montana; Ph.D. (1963), Washington. At Oregon since 1960.
- G. DOUGLAS STRATON, Ph.D., Associate Professor of Religious Studies; Head of Department.
A.B. (1938), Harvard; B.D. (1941), Andover Newton; Ph.D. (1950), Columbia. At Oregon since 1959.
- GEORGE STREISINGER, Ph.D., Professor of Biology; Research Associate, Institute of Molecular Biology.
B.S. (1950), Cornell; Ph.D. (1954), Illinois. At Oregon since 1960.
- HAROLD K. STROM, Ph.D., Associate Professor of Transportation; Director, Transport and Logistics Research Center.
B.A. (1957), M.B.A. (1958), Washington; Ph.D. (1964), California at Los Angeles. At Oregon since 1965.
- KARL R. STROMBERG, Ph.D., Associate Professor of Mathematics.
B.A. (1953), M.A. (1954), Oregon; Ph.D. (1958), Washington. At Oregon since 1960.
- †GEORGE W. STRUBLE, Ph.D., Associate Professor of Mathematics; Associate Director, Statistical Laboratory and Computing Center.
A.B. (1954), Swarthmore; M.S. (1957), Ph.D. (1961), Wisconsin. At Oregon since 1961.
- ROBERT A. STRUTHERS, M.D., Associate Director, Health Services, with the Rank of Instructor, Tongue Point Job Corps Center.
A.B. (1942), Oregon State; M.D. (1946), Vermont. At Oregon since 1967.
- LELAND E. STUART, M.A., Instructor in Education.
B.A. (1962), Chico State; M.A. (1964), Oregon. At Oregon since 1967.

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† On sabbatical leave, winter and spring terms, 1967-68.

- EMORY F. SUMMERS, M.A., Instructor in Physical Education; Tennis Coach.
B.A. (1957), California; M.A. (1963), University of the Pacific. At Oregon since 1967.
- ROBERT S. SUMMERS, B.S., LL.B., Associate Professor of Law.
B.S. (1955), Oregon; LL.B. (1959), Harvard. At Oregon since 1960.
- CLARA SHU-YI SUN, M.A., Senior Instructor in Chinese.
B.Ed. (1947), Peking; M.A. (1952), Marquette. At Oregon since 1966.
- NORMAN D. SUNDBERG, Ph.D., Dean of the School of Community Service and Public Affairs; Professor of Psychology.
B.A. (1947), Nebraska; M.A. (1949), Ph.D. (1952), Minnesota. At Oregon since 1952.
- RALPH C. SUNDERLAND, B.S., Chief Budget Officer, with the Rank of Associate Professor.
B.S. (1957), Oregon State. At Oregon since 1962.
- RAYMOND R. SUSKIND, M.D., Professor of Environmental Medicine and Dermatology, Medical School; Head of Division of Environmental Medicine.
A.B. (1934), Columbia; M.D. (1943), Long Island. At Oregon since 1962.
- JOHN E. SUTTLE, Ed.D., Associate Professor of Education.
B.S. (1948), Ed.D. (1960), Texas; M.Ed. (1952), Colorado. At Oregon since 1959.
- KESTER SVENDSEN, Ph.D., Professor of English; Head of Department.
B.A. (1934), Charleston; M.A. (1935), Ph.D. (1940), North Carolina. At Oregon since 1959.
- PAUL SWADENER, M.B.A., Instructor in Insurance.
B.S. (1960), M.B.A. (1962), Indiana. At Oregon since 1965.
- KENNETH C. SWAN, M.D., Professor of Ophthalmology, Medical School; Chairman of Department.
B.A. (1933), M.D. (1936), Oregon. At Oregon since 1944.
- ROY L. SWANK, M.D., Ph.D., Professor of Medicine, Medical School; Head of Division of Neurology.
B.S. (1930), Washington; Ph.D. (1935), M.D. (1936), Northwestern. At Oregon since 1953.
- KENNETH W. SWEENEY, B.S., Associate Planner, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
B.S. (1959), Iowa. At Oregon since 1966.
- DONALD F. SWINEHART, Ph.D., Professor of Chemistry.
B.S. (1939), Capital; M.S. (1941), Ph.D. (1943), Ohio State. At Oregon since 1946.
- MIYAKO TAKENO, M.S., Catalog Librarian; Instructor in Library Administration.
B.A. (1953), Tokyo; M.A. (1963), Washington; M.S. (1966), Oregon. At Oregon since 1967.
- DAN J. TANNACITO, A.B., Instructor in English.
A.B. (1964), Boston College. At Oregon since 1965.
- ROBERT F. TATE, Ph.D., Professor of Mathematics.
M.S. (1949), North Carolina; B.A. (1944), Ph.D. (1952), California at Berkeley. At Oregon since 1965.
- JAMES N. TATTERSALL, Ph.D., Associate Professor of Economics.
B.A. (1954), M.A. (1956), Ph.D. (1960), Washington. At Oregon since 1957.
- CAROL M. TAYLOR, M.A., Instructor in Speech.
B.A. (1965), Stetson; M.A. (1967), Georgia. At Oregon since 1967.
- CHET H. TAYLOR, M.A., Instructor in English.
B.A. (1961), Texas; M.A. (1963), University of the Americas (Mexico City). At Oregon since 1966.
- DALE M. TAYLOR, M.Arch., Assistant Professor of Architecture.
B.Arch. (1966), Texas; M.Arch. (1967), Pennsylvania. At Oregon since 1967.
- DIRK P. TEN BRINKE, Ph.D., Adjunct Assistant Professor of Education; Head of Science Department, South Eugene High School.
B.S. (1943), M.A. (1953), Ph.D. (1964), Minnesota. At Oregon since 1956.

- SANFORD S. TEPPER, Ph.D., Professor of Biology; Acting Head of Department.
B.S. (1938), College of City of New York; M.S. (1939), Cornell; Ph.D. (1950), California. At Oregon since 1955.
- LOUIS G. TERKLA, D.M.D., Dean of the Dental School; Professor of Dentistry; Clinical Professor of Dental and Oral Medicine, Medical School; Head of Division.
D.M.D. (1952), Oregon. At Oregon since 1952.
- JANE THACHER, Professor Emeritus of Piano.
At Oregon since 1916.
- W. F. GOODWIN THACHER, M.A., Professor Emeritus of English.
A.B. (1900), M.A. (1907), Princeton. At Oregon since 1914.
- *EDWARD P. THATCHER, M.A., Science Librarian; Assistant Professor of Library Administration.
B.A. (1940), Swarthmore; M.A. (1940), B.S. in L.S. (1952), Minnesota. At Oregon since 1952.
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B.A. (1959), Portland State. At Oregon since 1965.
- ARTHUR L. THOMAS, Ph.D., Associate Professor of Accounting.
B.A. (1952), M.B.A. (1956), Cornell; Ph.D. (1963), Michigan. At Oregon since 1963.
- MAUDEST C. THOMAS, B.A., Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.
B.A. (1964), Whitworth. At Oregon since 1967.
- STAFFORD G. THOMAS, M.Ed., Assistant Director, Federal Government Relations, with the Rank of Assistant Professor.
B.S. (1955), Southern Oregon; M.Ed. (1963), Oregon. At Oregon since 1965.
- ANDREW THOMPSON, Ph.D., Assistant Professor of Education; Counselor, University Counseling Center, with the Rank of Associate Professor.
B.A. (1956), M.A. (1959), Ph.D. (1963), Minnesota. At Oregon since 1965.
- *DONALD L. THOMPSON, Ph.D., Associate Professor of Marketing; Assistant Dean of the Graduate School of Management and Business, College of Business Administration.
B.S. (1951), Pennsylvania; M.S. (1958), San Francisco State; Ph.D. (1963), California. At Oregon since 1963.
- SYDNEY D. THOMPSON, B.S., Administrative Assistant in Community Service, with the Rank of Instructor, Tongue Point Job Corps Center.
B.S. (1949), Babson Institute of Business Administration. At Oregon since 1967.
- JOHN D. THORPE, B.S., Director of Married Student Housing, with the Rank of Assistant Professor.
B.S. (1950), Oregon. At Oregon since 1962.
- PETER L. THORPE, Ph.D., Assistant Professor of English.
B.A. (1957), M.A. (1961), Ph.D. (1963), Washington. At Oregon since 1966.
- CLARENCE E. THURBER, Ph.D., Professor of International and Public Affairs; Deputy Director, Institute of International Studies and Overseas Administration.
B.A. (1943), Ph.D. (1961), Stanford. At Oregon since 1966.
- HERBERT W. TITUS, LL.B., Associate Professor of Law.
B.A. (1959), Oregon; LL.B. (1962), Harvard. At Oregon since 1966.
- JOHN B. TOELKEN, Ph.D., Assistant Professor of English.
B.S. (1958), Utah State; M.A. (1959), Washington State; Ph.D. (1964), Oregon. At Oregon 1960-64 and since 1966.
- KENNETH C. TOLLENAAR, M.A., Research Associate, Bureau of Governmental Research and Service with the Rank of Professor.
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* On leave of absence 1967-68.

- THOMAS J. TOMANEK, Ph.D., Assistant Professor of Romance Languages.
Ph.D. (1955), Prague. At Oregon since 1966.
- SAUL TOOBERT, Ph.D., Assistant Director, University Counseling Center, with the Rank of Associate Professor.
B.A. (1947), California; Ph.D. (1965), Oregon. At Oregon since 1963.
- DONALD E. TOPE, Ph.D., Professor of Education.
B.A. (1928), Western State College (Colorado); M.A. (1929), Ph.D. (1934), Iowa. At Oregon since 1951.
- RICHARD TROMBLEY, M.Mus., Assistant Professor of Music (Flute, Music History).
B.S. (1961), Juilliard; M.Mus. (1962), Manhattan School of Music. At Oregon since 1963.
- ROBERT M. TROTTER, Ph.D., Dean of the School of Music; Professor of Music (Theory, Music History).
B.Mus. (1943), Northwestern; M.A. (1947), Chicago; Ph.D. (1957), Southern California. At Oregon since 1963.
- DONALD R. TRUAX, Ph.D., Associate Professor of Mathematics.
B.S. (1951), M.S. (1953), Washington; Ph.D. (1955), Stanford. At Oregon since 1959.
- MONTE E. TUBB, M.Mus., Assistant Professor of Music (Composition, Music Theory).
B.A. (1956), Arkansas; M.Mus. (1960), Indiana. At Oregon since 1966.
- MIRIAM L. TUCK, Ed.D., P.H.N., Professor of Health Education.
B.S. (1954), New York University; M.A. (1956), Ed.D. (1961), Columbia; R.N. (1945), State of New York; P.H.N. (1947), California at Berkeley. At Oregon since 1962.
- PAUL E. TUCKER, M.Ed., Instructor in Education.
B.S. (1962), Southern Oregon; M.Ed. (1967), Oregon. At Oregon since 1967.
- DONALD S. TULL, Ph.D., Professor of Marketing; Head, Department of Marketing, Insurance, and Transportation.
B.S. (1948), M.B.A. (1949), Ph.D. (1956), Chicago. At Oregon since 1967.
- GEORGE S. TURNBULL, M.A., Professor Emeritus of Journalism.
A.B. (1915), M.A. (1932), Washington. At Oregon since 1917.
- GENEVIEVE G. TURNIPSEED, M.A., Director Emeritus of Dormitories.
A.M. (1922), B.S. (1922), Iowa; M.A. (1930), Columbia. At Oregon since 1930.
- *LEONA E. TYLER, Ph.D., Dean of the Graduate School; Professor of Psychology.
B.S. (1925), M.S. (1939), Ph.D. (1941), Minnesota. At Oregon since 1940.
- RICHARD L. UNRUH, M.Arch., University Architect and Planner, with the Rank of Associate Professor; Assistant Professor of Architecture.
B.A. (1952), Willamette; B.Arch. (1956), Massachusetts Institute of Technology; M.Arch. (1963), Pennsylvania. At Oregon since 1963.
- DE NORVAL UNTHANK, JR., B.Arch., Visiting Lecturer in Architecture.
B.Arch. (1952), Oregon. At Oregon since 1965.
- †ALVIN W. URQUHART, Ph.D., Associate Professor of Geography.
B.A. (1953), M.A. (1958), Ph.D. (1962), California at Berkeley. At Oregon since 1963.
- JORDAN UTSEY, D.Ed., Associate Professor of Education.
B.A. (1952), College of Idaho; M.Ed. (1958), D.Ed. (1963), Oregon. At Oregon since 1963.
- MICHAEL UTSEY, B.Arch., Instructor in Architecture.
B.Arch. (1967), Texas. At Oregon since 1967.
- ROBERT S. VAGNER, M.A., M.Mus., Professor of Music (Clarinet); Director, University Bands.
B.A. (1935), M.A. (1938), Colorado State College; M.Mus. (1942), Michigan. At Oregon since 1950.

* On leave of absence, winter and spring terms, 1967-68.

† On leave of absence 1967-68.

- KARL A. VAN ASSELT, M.A., Research Assistant, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
B.S. (1962), Western Michigan; M.A. (1964), Washington State. At Oregon since 1967.
- JAMES M. VAN BUSKIRK, Ph.D., Assistant Professor of Mathematics.
B.S. (1954), Wisconsin State (Superior); M.S. (1955), Ph.D. (1962), Wisconsin. At Oregon since 1962.
- STANLEY C. VANCE, Ph.D., H. T. Miner Professor of Business Administration; Head, Department of Personnel and Industrial Management.
B.A. (1937), St. Charles; M.A. (1944), Ph.D. (1950), Pennsylvania. At Oregon since 1960.
- WENDELL L. VAN LOAN, D.Ed., Professor of Education.
B.S. (1928), M.S. (1933), Oregon; D.Ed. (1942), Stanford. At Oregon 1930-43, and since 1965.
- DONALD P. VAN ROSSEN, M.Ed., Assistant Professor of Physical Education; Swimming Coach.
B.S. (1953), M.Ed. (1954), Illinois. At Oregon since 1958.
- FRANCES VAN VOORHIS, M.S., Assistant Professor of Home Economics.
B.S. (1932), Minnesota; M.S. (1949), Iowa State. At Oregon since 1944.
- WILBUR N. VAN ZILE, D.D.S., Professor of Dentistry, Dental School; Head of Department of Oral Surgery.
D.D.S. (1928), California. At Oregon since 1959.
- DOMINICK R. VETRI, LL.B., Assistant Professor of Law.
B.S. (1960), Newark College of Engineering; LL.B. (1964), Pennsylvania. At Oregon since 1967.
- DENNIS L. VETRUS, B.A., Assistant Director of Dormitories, with the Rank of Assistant Professor.
B.A. (1961), Denver. At Oregon since 1963.
- KENNETH D. VIEGAS, M.S.W., Visiting Lecturer in Sociology.
B.S. (1956), Oregon; M.S.W. (1963), California. At Oregon since 1967.
- ANDREW M. VINCENT, Professor of Art.
Grad. (1929), Chicago Art Institute School. At Oregon since 1929.
- PETER H. VON HIPPEL, Ph.D., Professor of Chemistry; Research Associate, Institute of Molecular Biology.
B.S. (1952), M.S. (1953), Ph.D. (1955), Massachusetts Institute of Technology. At Oregon since 1967.
- BENJAMIN WALCOTT, B.A., Instructor in Biology.
B.A. (1963), Harvard. At Oregon since 1967.
- PAUL R. WALDO, M.A., Instructor in Speech.
B.S. (1958), Portland State; M.A. (1960), Michigan. At Oregon since 1964.
- MAX WALES, M.A., Professor of Journalism.
B.A. (1933), Washburn; M.A. (1956), Iowa. At Oregon since 1957.
- JAMES G. WALKER, M.S., Visiting Lecturer in Recreation.
B.S. (1961), M.S. (1966), Oregon. At Oregon since 1967.
- LAWRENCE L. WALKER, B.L.A., Visiting Assistant Professor of Landscape Architecture.
B.L.A. (1964), Oregon. At Oregon since 1967.
- LUISE E. WALKER, M.S., Acting Head Science Librarian; Assistant Professor of Library Administration.
A.B. (1951), Washington; A.M.L.S. (1955), Michigan; M.S. (1961), State University of New York, College of Forestry. At Oregon since 1967.
- DWIGHT T. WALLACE, Ph.D., Assistant Professor of Anthropology.
A.B. (1950), Ph.D. (1957), California. At Oregon since 1961.

- CARL J. WALLEN, Ed.D., Associate Professor of Education.
A.B. (1956), California at Santa Barbara; M.A. (1960), San Francisco State; Ed.D. (1962), Stanford. At Oregon since 1967.
- RONALD C. WALLER, Ph.D., Associate Professor of Education.
B.A. (1953), Alberta; Ph.D. (1963), California at Los Angeles. At Oregon since 1967.
- GREGORY H. WANNIER, Ph.D., Professor of Physics.
Ph.D. (1935), Basel. At Oregon 1959 and since 1961.
- LEWIS E. WARD, JR., Ph.D., Professor of Mathematics; Director of Academic Advising; Assistant Dean, College of Liberal Arts.
B.A. (1949), California; M.S. (1951), Ph.D. (1953), Tulane. At Oregon since 1959.
- CHARLES WARFIELD, M.A., Instructor in Education.
B.A. (1962), M.A. (1963), Western Michigan. At Oregon since 1967.
- JOHN L. WARFIELD, M.A., Instructor in Education.
B.A. (1959), Kalamazoo; M.A. (1961), Denver. At Oregon since 1964.
- HUGH E. WARREN, Ph.D., Assistant Professor of Mathematics.
B.S. (1963), Stanford; Ph.D. (1966), Michigan. At Oregon since 1966.
- PAUL R. WASHKE, Ph.D., Professor of Physical Education.
A.B. (1927), Western State Teachers (Michigan); A.M. (1929), Michigan; Ph.D. (1943) New York University. At Oregon since 1930.
- ROBERT F. WATKINS, D.M.D., Associate Professor of Dentistry, Dental School; Head, Department of Endodontia.
D.M.D. (1949), Oregon. At Oregon since 1949.
- W. GRANT WATKINSON, M.B.A., Instructor in Business Administration.
B.S. (1964), Oregon State; M.B.A. (1966), Oregon. At Oregon since 1966.
- DONALD A. WATSON, Ph.D., Professor of Finance; Director, Bureau of Business and Economic Research.
B.A. (1947), M.A. (1948), Ph.D. (1951), Iowa. At Oregon since 1956.
- EDWARD G. WATSON, M.A., Associate Planner, Bureau of Governmental Research and Service, with the Rank of Assistant Professor.
B.A. (1943), Reed; M.A. (1948), Washington. At Oregon since 1962.
- MARSHALL D. WATTLES, Ph.D., Associate Dean of Faculties; Professor of Economics.
B.A. (1938), Southwest Missouri State; M.A. (1941), Missouri; Ph.D. (1950), Ohio State. At Oregon since 1950.
- MARIAN P. WATTS, B.A., B.S. in L.S., Reference Librarian Emeritus.
B.A. (1921), Oregon; B.S. in L.S. (1934), Illinois. At Oregon since 1921.
- RUTH WAUGH, M.S., Senior Instructor in Education; Coordinator, DeBusk Center.
B.S. (1957), Southern Oregon; M.S. (1963), Oregon. At Oregon since 1963.
- *GARY D. WEATHERFORD, LL.B., Assistant Professor of Law.
B.A. (1958), Redlands; B.D. (1961), LL.B. (1964), Yale. At Oregon since 1966.
- †A. KINGSLEY WEATHERHEAD, Ph.D., Professor of English; Associate Dean of the College of Liberal Arts.
M.A. (1949), Cambridge; M.A. (1949), Edinburgh; Ph.D. (1958), Washington. At Oregon since 1960.
- CARL C. WEBB, M.A., Associate Professor of Journalism.
B.S. (1932), M.A. (1950), Oregon. At Oregon since 1943.
- LORA M. WEBB, B.S., Special Assistant to Foreign Student Adviser, with the Rank of Instructor.
B.S. (1931), Oregon. At Oregon since 1966.

* On leave of absence, winter term, 1967-68.

† On sabbatical leave 1967-68.

- VINSON M. WEBER, D.D.S., Professor of Dentistry, Dental School; Head of Department of Postgraduate Education.
A.B. (1936), Oberlin; M.A. (1940), Michigan; D.D.S. (1946), Western Reserve. At Oregon since 1947.
- CHRISTOF A. WEGELIN, Ph.D., Professor of English.
M.A. (1942), North Carolina; Ph.D. (1947), Johns Hopkins. At Oregon since 1952.
- DANIEL F. WEILL, Ph.D., Associate Professor of Geology.
B.A. (1956), Cornell; M.S. (1958), Illinois; Ph.D. (1962), California. At Oregon since 1966.
- ROBERT L. WEISS, Ph.D., Professor of Psychology.
B.A. (1952), Ph.D. (1958), State University of New York at Buffalo. At Oregon since 1966.
- SEFTON R. WELLINGS, M.D., Ph.D., Professor of Pathology, Medical School; Chairman of Department.
B.S. (1951), M.D. (1953), Washington; Ph.D. (1961), California. At Oregon since 1961.
- BENJAMIN B. WELLS, JR., M.S., Instructor in Mathematics.
B.S. (1961), M.S. (1962), Michigan. At Oregon since 1967.
- INGRID D. WENDT, B.A., Instructor in English.
B.A. (1966), Cornell College. At Oregon since 1967.
- ARNOLD M. WESTLING, B.S., Planning and Public Works Consultant, Bureau of Governmental Research and Service, with the Rank of Professor.
B.S. (1943), Washington. At Oregon since 1947.
- FRANKLIN S. WHICHER, M.S., Catalog Librarian; Instructor in Library Administration.
B.A. (1955), M.S. (1961), Illinois. At Oregon since 1966.
- WILLIAM E. WHITELAW, B.A., Assistant Professor of Economics; Research Associate, Bureau of Governmental Research and Service.
B.A. (1963), Montana. At Oregon since 1967.
- VIRGINIA J. WHITFIELD, Ed.D., Associate Professor of Music (Music Education).
B.Mus. (1934), M.Mus. (1946), Colorado; Ed.D. (1962), California at Los Angeles. At Oregon since 1965.
- PHYLLIS G. WHITTIER, M.A., Lecturer in English.
B.A. (1960), Minnesota; M.A. (1962), Oregon. At Oregon since 1967.
- GOLDA P. WICKHAM, B.S., Dean of Women and Associate Dean of Students, with the Rank of Professor.
B.S. (1931), Oregon. At Oregon since 1944.
- *MARGARET J. WIESE, M.A., Assistant Professor of Home Economics; Head of Department.
B.S. (1941), Iowa State; M.A. (1945), Iowa. At Oregon since 1947.
- JACK WILKINSON, Professor of Art; Head, Department of Fine and Applied Arts.
Grad. (1937), California School of Fine Arts. At Oregon since 1941.
- *OLIVER M. WILLARD, Ph.D., Associate Professor of English.
B.A. (1927), Stanford; A.M. (1931), Ph.D. (1936), Harvard. At Oregon since 1946.
- RUTH A. WILLARD, Ed.D., Associate Professor of Education.
B.A. (1943), M.A. (1945), Iowa; Ed.D. (1952), California. At Oregon since 1952.
- ASTRID M. WILLIAMS, Ph.D., Associate Professor of Germanic Languages.
B.A. (1921), M.A. (1932), Oregon; Ph.D. (1934), Marburg. At Oregon since 1935.
- JAMES D. WILLIAMS, M.S., Resident Counselor, with the Rank of Instructor, Tongue Point Job Corps Center.
B.A. (1960), Seattle Pacific; M.S. (1963), Oregon. At Oregon since 1965.
- MILDRED H. WILLIAMS, D.Ed., Adjunct Associate Professor of Education; Head of Social Studies Department, South Eugene High School.
B.A. (1925), M.A. (1930), D.Ed. (1954), Oregon. At Oregon since 1930.

* On sabbatical leave 1967-68.

- WILLIAM B. WILLINGHAM, M.A., Program Director, PL-3, with the Rank of Assistant Professor.
B.A. (1957), M.A. (1963), Indiana. At Oregon since 1965.
- A. DENNIS WILLOWS, Ph.D., Visiting Assistant Professor of Biology.
B.S. (1963), Yale; Ph.D. (1967), Oregon. At Oregon since 1967.
- NEIL E. WILSON, M.Mus., Associate Professor of Music (Voice); Director, Chamber Choir.
B.F.A. (1952), M.Mus. (1955), New Mexico. At Oregon since 1961.
- PAUL F. WILSON, M.D., Associate University Physician, with the Rank of Professor.
B.S. (1944), M.D. (1947), Oregon. At Oregon since 1967.
- WILLIAM W. WILSON, B.S., Instructor in Architecture.
B.A. (1943), Reed; B.S. (1943), Massachusetts Institute of Technology. At Oregon since 1967.
- DONALD E. WIMBER, Ph.D., Associate Professor of Biology.
B.A. (1952), San Diego State; M.A. (1954), Ph.D. (1956), Claremont. At Oregon since 1963.
- CARRYL H. WINES, Superintendent of University Press, with the Rank of Associate Professor.
At Oregon since 1962.
- MAURICE G. WINTER, B.S., Major, U.S. Army; Assistant Professor of Military Science.
B.S. (1959), Washington State. At Oregon since 1967.
- GARY WIREN, M.A., Instructor in Physical Education.
B.A. (1958), Huron; M.A. (1960), Michigan. At Oregon since 1965.
- RALPH M. WIRFS, B.S., Instructor in English.
B.S. (1960), Oregon College of Education. At Oregon since 1966.
- JOHN R. WISH, Ph.D., Assistant Professor of Marketing.
B.S. (1956), M.B.A. (1962), Ohio State; Ph.D. (1967), Michigan State. At Oregon since 1966.
- HERBERT P. WISNER, M.A., Instructor in Biology.
B.A. (1949), M.A. (1950), Syracuse. At Oregon since 1966.
- HARRY F. WOLCOTT, Ph.D., Associate Professor of Education; Research Associate, Center for Advanced Study of Educational Administration.
B.S. (1951), California; M.A. (1959), San Francisco State; Ph.D. (1964), Stanford. At Oregon since 1964.
- LOUIS M. WOLF, M.D., Consulting Psychiatrist, with the Rank of Instructor, Tongue Point Jobs Corps Center.
B.S. (1936), Emmanuel; M.D. (1938), College of Medical Evangelists. At Oregon since 1965.
- NOLA L. WOLF, M.A., Assistant Documents Librarian; Instructor in Library Administration.
B.A. (1960), Colorado; M.A. (1967), Denver. At Oregon since 1967.
- RAYMOND G. WOLFE, JR., Ph.D., Professor of Chemistry.
A.B. (1942), M.A. (1948), Ph.D. (1955), California. At Oregon since 1956.
- *HUGH B. WOOD, Ed.D., Professor of Education.
B.S. (1931), Toledo; M.A. (1935), Colorado; Ed.D. (1937), Columbia. At Oregon since 1939.
- KENNETH S. WOOD, Ph.D., Professor of Speech; Director, Speech and Hearing Clinic.
B.S. (1935), Oregon State; M.A. (1938), Michigan; Ph.D. (1946), Southern California. At Oregon since 1942.
- MABEL A. WOOD, M.S., Professor Emeritus of Home Economics.
B.S. (1925), Oregon State; M.S. (1930), Columbia. At Oregon since 1932.

* On sabbatical leave, fall and spring terms, 1967-68.

JOHN E. WOODHAM, Ph.D., Assistant Professor of History.

B.A. (1960), Birmingham-Southern; M.A. (1963), Ph.D. (1964), Duke. At Oregon since 1964.

JANET G. WOODRUFF, M.A., Professor Emeritus of Physical Education.

B.S. (1926), M.A. (1929), Columbia. At Oregon since 1929.

JEAN M. WOODS, M.A., Instructor in German.

B.A. (1948), Wellesley; M.A. (1965), Oregon. At Oregon since 1965.

WILLIAM C. WOODS, M.M., Associate Professor of Music (Piano, Music History); Member, University Trio.

B.M. (1948), M.M. (1949), Southern California. At Oregon since 1950.

RICHARD K. WOODWARD, M.D., Associate University Physician, with the Rank of Professor.

B.S. (1955), M.D. (1960), Oregon. At Oregon since 1961.

EDNA P. WOOTEN, Ph.D., Associate Professor of Physical Education.

B.S. (1945), M.A. (1946), Ph.D. (1961), Ohio State. At Oregon since 1965.

*CHARLES R. B. WRIGHT, Ph.D., Associate Professor of Mathematics.

B.A. (1956), M.A. (1957), Nebraska; Ph.D. (1959), Wisconsin. At Oregon since 1961.

IRWIN I. WRIGHT, B.S., Director of Physical Plant, with the Rank of Professor.

B.S. (1926), Kansas State. At Oregon since 1947.

LEAVITT O. WRIGHT, Ph.D., Professor Emeritus of Romance Languages.

A.B. (1914), Harvard; B.D. (1917), Union Theological Seminary; M.A. (1925), Ph.D. (1928), California. At Oregon since 1926.

ROBERT D. WYATT, B.A., Instructor in English.

B.A. (1964), San Francisco State. At Oregon since 1967.

J. LYNN WYKOFF, Director of Public Information, with the Rank of Instructor, Tongue Point Job Corps Center.

At Oregon since 1966.

AGNES A. YAMADA, M.A., Instructor in English.

B.A. (1954), Hawaii; M.A. (1961), M.Ed. (1962), Oregon. At Oregon since 1967.

HUI-TZE W. YAN, M.L.S., Reference Librarian; Instructor in Library Administration.

B.A. (1963), Taipei; M.L.S. (1967), Oregon. At Oregon since 1967.

MORRIS YAROWSKY, M.F.A., Visiting Assistant Professor of Art.

A.B. (1955), Dartmouth; M.F.A. (1963), California College of Arts and Crafts. At Oregon since 1965.

JUNE C. YEATES, B.A., Supervisor, Recreation and Physical Education, with the Rank of Instructor, Tongue Point Job Corps Center.

At Oregon since 1967.

JOAN YEATMAN, M.A., Instructor in English.

B.A. (1961), Southwestern Louisiana; M.A. (1962), Duke. At Oregon since 1963.

BERTRAM YOOD, Ph.D., Professor of Mathematics.

B.S. (1938), Ph.D. (1947), Yale; M.S. (1939), California Institute of Technology. At Oregon since 1953.

HILDA YEE YOUNG, M.Ed., Counselor Supervisor, Dormitories, with the Rank of Instructor.

B.Ed. (1958), M.Ed. (1960), Hawaii. At Oregon since 1962.

PHILIP D. YOUNG, B.A., Acting Assistant Professor of Anthropology.

B.A. (1961), Illinois. At Oregon since 1966.

RICHARD O. YOUNG, Ed.S., Counselor, University Counseling Center, with the Rank of Assistant Professor.

B.Ed. (1954), Toledo; M.Ed. (1958), M.A. (1964), Ed.S. (1967), Michigan. At Oregon since 1965.

* On sabbatical leave 1967-68.

LOIS J. YOUNGEN, M.A., Assistant Professor of Physical Education.

B.S. (1955), Kent; M.A. (1957), Michigan State. At Oregon since 1960.

JAN ZACH, Professor of Art.

At Oregon since 1958.

MARTIN G. ZANINOVICH, Ph.D., Assistant Professor of Political Science.

B.A. (1953), M.A. (1959), Ph.D. (1964), Stanford. At Oregon since 1966.

BEVERLY H. ZAWLOCKI, Resident Adviser, with the Rank of Instructor, Tongue Point Job Corps Center.

At Oregon since 1967.

L. HARMON ZEIGLER, Ph.D., Professor of Political Science; Research Associate, Center for Advanced Study of Educational Administration.

B.A. (1957), Emory; M.A. (1958), Ph.D. (1960), Illinois. At Oregon since 1964.

ROBERT C. ZILLER, Ph.D., Professor of Psychology; Research Associate, Center for Advanced Study of Educational Administration.

B.A. (1947), Northern Michigan; M.A. (1948), Ph.D. (1956), Michigan. At Oregon since 1966.

ROBERT L. ZIMMERMAN, Ph.D., Assistant Professor of Physics; Research Associate in Physics.

B.A. (1958), Oregon; Ph.D. (1963), Washington. At Oregon since 1967.

WILLIAM A. ZIMMERMAN, B.S., Associate Dean for Business Affairs, Medical School (Professor).

B.S. (1939), Oregon. At Oregon since 1940.

JAMES A. ZUMBRUNNEN, B.S., Assistant Professor of Military Science.

B.A. (1965), Washington State. At Oregon since 1966.

*ARNULF ZWEIG, Ph.D., Associate Professor of Philosophy.

B.A. (1952), Rochester; Ph.D. (1960), Stanford. At Oregon since 1956.

* On leave of absence, fall term, 1967-68.

General Information

History of the University

THE UNIVERSITY OF OREGON was established by an act of the Oregon Legislature in 1872, but did not open its doors to students until four years later, in 1876. The founding of the University grew out of a Federal grant, authorized in the Donation Act of September 27, 1850, of two townships of land "to aid in the establishment of a university in the territory of Oregon." The territory then included the entire Oregon Country; it was specified that one of the townships was to be located north of the Columbia.

On July 17, 1854, the grant was changed by an act reserving two townships each for the newly separated Washington and Oregon territories. This grant was confirmed on February 14, 1859, when the Act of Congress admitting Oregon into the Union provided for a grant of seventy-two sections of land for the establishment and support of a state university. The Legislature, by an act of June 3, 1859, committed the people of Oregon to the application of the proceeds from this grant "to the use and support of a state university."

The settlement of Oregon and the accumulation of funds from the sale of these University lands progressed slowly. In 1850 the population of the entire Oregon Country was only 13,294. In 1860 the population of the state was 52,465, and in 1870, 90,993. There were already five denominational colleges in the state in 1860, and the United States census of 1870 reported that there were twenty "classical, professional and technical" institutions ("not public") in Oregon. The creation of a state university was deferred.

However, after a fund of \$31,635 had accumulated from the sale of University lands, the Legislature on October 19, 1872 passed an act "to create, organize and locate the University of the State of Oregon." Eugene was chosen as a site after the Lane County delegation in the Legislature had offered to provide a building and campus worth \$50,000. The Union University Association of Eugene, the organization promoting the institution, was given two years in which to construct this building.

Construction of the building, Deady Hall, began in May 1873. However, the genesis of the University and the economic troubles of 1873 coincided, and it was only after an intense struggle to keep the enterprise alive and a two-year extension of time for completion that the conditions specified in the act creating the University were declared fulfilled. The site and building were accepted by the state on July 28, 1876, and the University opened its first session on October 16, 1876. The first class was graduated in June 1878.

Deady Hall was the nucleus around which other University buildings later arose; Villard Hall, the second campus structure, was built in 1885.

The first University courses were limited almost entirely to classical and literary subjects; the demand for a broader curriculum was, however, gradually met by the addition of scientific and professional instruction. Around the original liberal arts college were organized the professional schools, beginning with the School of Law, established as a night law school in Portland in 1884 (in 1915 the School of Law was moved to Eugene and reorganized as a regular division of the University). The Medical School was established in Portland in 1887. The Graduate School was organized in 1900, the School of Music in 1902, the School of Education in 1910, the School of Architecture and Allied Arts and the School of Business Administration in 1914, the School of Journalism in 1916, and the School

of Health, Physical Education, and Recreation in 1920. The Dental School, located in Portland, became a part of the University in 1945; its previous history as a privately supported institution dates from 1893. The School of Nursing, located on the Medical School campus in Portland, was organized in 1960 (a degree curriculum in nursing has been offered by the University since 1926; from 1932 to 1960 the program was administered through the Department of Nursing Education of the Medical School). The Honors College was established in 1960, the School of Librarianship in 1966, and the School of Community Service and Public Affairs in 1967.

Since its founding, the following men have served the University as president: John Wesley Johnson, 1876-1893; Charles H. Chapman, 1893-1899; Frank Strong, 1899-1902; Prince Lucien Campbell, 1902-1925; Arnold Bennett Hall, 1926-1932; Clarence Valentine Boyer, 1934-1938; Donald Milton Erb, 1938-1943; Orlando John Hollis, acting president, 1944-1945; Harry K. Newburn, 1945-1953; Victor Pierpont Morris, acting president, 1953-1954; O. Meredith Wilson, 1954-1960; William C. Jones, acting president, 1960-1961; Arthur S. Flemming, since 1961.

Income

THE STATE LAW creating the Board of Higher Education specified that this body was to "have and exercise control of the use, distribution and disbursement of all funds, appropriations and taxes, now or hereafter in possession, levied and collected, received or appropriated for the use, benefit, support and maintenance of institutions of higher education." Under this act, effective July 1, 1931, the Board administers all funds for all state-supported higher-educational activities, including the University of Oregon, on the basis of a unified budget.

Funds for the support of higher education in Oregon are derived primarily from the following sources: state appropriations for the operation of the institutions; specified sums from the national government assigned for definite purposes by Congressional acts; income from student tuition and fees; and other sources such as gifts, grants, sales, service charges, etc.

University of Oregon Development Fund. An integrated and continuing program to obtain financial support of the academic work of the University from private donors is operated through the University of Oregon Development Fund, a nonprofit organization incorporated under the laws of the state of Oregon. The fund is administered through a Board of Directors, including alumni, faculty members, students, and other friends of the institution. Information concerning the program and concerning University needs for which private support is essential may be obtained from Alfred L. Ellingson, Director of Development.

Campuses

THE MAIN CAMPUS of the University of Oregon is located in Eugene (population 75,300), 109 miles south of Portland, at the head of the Willamette Valley. Eugene is a progressive city with excellent schools, numerous churches, and strong civic and social organizations. The climate is mild, with moderate winters and cool summers. The average annual rainfall is 38½ inches, with the heaviest rainfall in the winter months, November, December, and January.

The Eugene campus occupies about 187 acres of land in the eastern part of the city. The campus is bisected by Thirteenth Avenue. The first University buildings were erected north of Thirteenth, on what is known as the "old campus." Later expansions have been principally to the south and east.

Most of the buildings on the old campus are arranged in a quadrangle: Fenton

Hall, Deady Hall, Villard Hall, Lawrence Hall, Allen Hall, and Friendly Hall. Johnson Hall (the Administration Building) is located across Thirteenth Avenue, facing the north quadrangle. South of Johnson Hall is an integrated group of buildings, including Gerlinger Hall (the women's gymnasium), Hendricks Hall, and Susan Campbell Hall.

A new quadrangle to the west includes Commonwealth Hall, north of Thirteenth Avenue, and, to the south, Condon Hall, Chapman Hall, the Museum of Art, Prince L. Campbell Hall, and the University Library. The Education Building and the Music Building are located south of this quadrangle.

Until the 1920s the east boundary of the campus was, roughly, University Street. Significant expansion beyond this boundary began with the erection of McArthur Court (the student athletic center) and the John Straub Memorial Building (a men's dormitory), and continued in the 1930s with the erection of the Physical Education Building. More recent additions in this area are the Science Building, the Anthropology Building, Emerald Hall (a temporary structure housing administrative and student-affairs offices), the Donald M. Erb Memorial Union, several dormitories, and the Student Health Service Building.

Since the end of World War II, extensive temporary housing facilities for married students have been erected on or near the campus. These facilities include houses and apartments east of the main campus and row-house apartments occupying a 30-acre tract about six blocks southwest of the campus. A permanent housing project for married students has been developed on the west side of Eugene.

There are three notable works of sculpture on the campus. "The Pioneer," by Alexander Phimister Proctor, stands on the old campus, facing Johnson Hall; it was given to the University in 1919 by Joseph N. Teal. "The Pioneer Mother," also by Proctor, is located in the women's quadrangle; it was given to the University in 1932 by Vice-President Emeritus Burt Brown Barker, in memory of his mother. "Prometheus" (1958), by Jan Zach, north of the Museum of Art, is the gift of alumnae and student members of Gamma Phi Beta.

The Medical School, the Dental School, and the School of Nursing are located on an 101-acre campus in Portland's southwest hills, overlooking the city. For further information see the Medical School, Dental School, and School of Nursing catalogs.

Libraries

CARL W. HINTZ, Ph.D.	University Librarian
DONALD T. SMITH, M.A., M.S.	Assistant University Librarian
LOIS BAKER, M.A.	Law Librarian
EUGENE B. BARNES, Ph.D.	Head Acquisition Librarian
ELIZABETH FINDLY, A.M.L.S.	Head Reference Librarian
DON L. HUNTER, B.S.	Head, Audiovisual Media Center
HOLWAY R. JONES, B.L.S., M.A.	Head Social Science Librarian
CLARICE E. KRIEG, B.S. in L.S., A.M.	Head Catalog Librarian
ROBERT R. MCCOLLOUGH, M.S., M.A.	Head Humanities Librarian
MARY CLAIRE MEYER, M.A.	Head Circulation Librarian
*ALAN W. ROECKER, B.L.S., Ph.M.	Head Science Librarian
MARTIN SCHMITT, B.S., B.S. in L.S.	Curator of Special Collections
LUISE E. WALKER, A.M.L.S., M.S.	Acting Head Science Librarian
MARGARET C. HARPER, M.L.S.	Senior Catalog Librarian
MARGARET MARKLEY, A.B., B.S. in L.S.	Senior Catalog Librarian
MARCIA C. BLEVINS, M.S.	Reference Librarian
RODNEY E. CHRISTENSEN, M.S.	Social Science Librarian
KAY F. DENFELD, M.A.	Acquisition Librarian
BARBARA FISHER, M.A.	University Archivist

* On leave of absence 1967-68.

PEGGY MARIE FRONE, B.A., B.L.S.	Browsing Room and Social Science Librarian
JAMES H. GRITTON, B.C.S., M.A., J.D.	Assistant Law Librarian
ALFRED HEILPERN, M.L.	Acquisition Librarian
J. RICHARD KEINZKILL, A.M.L.S.	Humanities Librarian
EUGENE A. HOERAUF, B.S.	Map Room Assistant
JANE Y. C. HSU, B.A.	Catalog Librarian
DWIGHT H. HUMPHREY, B.S. in L.S., M.A.	Catalog Librarian
M. HEATHER KEATE, B.S., B.L.S.	Science Librarian
EDWARD C. KEMP, M.L.S.	Acquisition Librarian
HOWARD LINDSTROM, M.A.	Assistant Head, Audiovisual Media Center
ROBERT R. LOCKARD, M.A.	Social Science Librarian
ROBIN B. LODEWICK, M.L.S.	Catalog Librarian
RICHARD J. LONG, M.S.	Reference Librarian
R. R. MCCREADY, M.A.	Reference Librarian
*CORINNE MCNEIR, M.S. in L.S.	Documents Librarian
DOROTHY M. MANNING, M.L.	Catalog Librarian
FRANCES NEWSOM, M.A.	Architecture and Allied Arts Librarian
ELIZABETH L. ORR, M.A.	Catalog Librarian
GUIDO PALANDRI, B.A., B.L.S.	Catalog Librarian
HUIBERT PAUL, M.L.S.	Acquisition Librarian
STEPHANIE S. PERKINS, M.S.	Social Science Librarian
MARGARET G. PETERSON, M.A.	Graphic Artist
JOANNE V. RHODES, M.L.	Science Librarian
ROSE MARIE SERVICE, M.A.	Social Science Librarian
JAMES H. SINDBERG, B.S.	Audiovisual Librarian
EDMUND F. SOULE, B.M., Ph.D.	Music Librarian
BETTY MAE STAMM, B.A.	Acquisition Librarian
MIYAKO TAKENO, M.A., M.S.	Catalog Librarian
†EDWARD P. THATCHER, M.A.	Science Librarian
FRANKLIN SCOTT WHICHER, M.S.	Catalog Librarian
NOLA L. WOLF, M.A.	Assistant Documents Librarian
HUI-TZE WANG YAN, M.L.S.	Reference Librarian
ROBERT M. DONNELL, M.A.	Dental School Librarian
MARGARET E. HUGHES, B.S.	Medical School Librarian

THE SERVICES of the University of Oregon Library are organized in broad subject divisions: Social Science, Science, Humanities, and General Reference. Each of the divisions has its own reading areas, conveniently integrated with its book collections. All University students have free access to the book stacks.

The services of the subject divisions are supplemented by the Audiovisual Media Center, which provides facilities for the production, preservation, and use of recordings, slides, films, and similar materials, and by the Special Collections Division, which is responsible for the development and care of collections of Pacific Northwest historical materials, rare books, manuscripts, and University archives.

The University Library was founded in 1882 through a gift of books, worth \$1,000, selected and purchased by Henry Villard of New York City. Before 1882 the only library available to students was a collection of about 1,000 volumes owned by the Laurean and Eutaxian student literary societies; this collection was made a part of the University Library in 1900. In 1881 Mr. Villard gave the University \$50,000 as a permanent endowment; a provision of the gift was that at least \$400 of the income should be used for the purchase of nontechnical books for the Library.

In addition to the general Library collections, the University has a number of specialized libraries with permanent collections. The holdings of the several libraries are shown below:

General Library	915,864
Law Library	65,128
Gertrude Bass Warner Memorial Library	984
Bureau of Governmental Research and Service Library	19,005
Total Eugene Campus	1,000,981

* On sabbatical leave, spring term, 1967-68.

† On leave of absence 1967-68.

Medical School Library	105,755
Dental School Library	11,264
Total	1,118,000

Other materials in the University Library include: 86,723 maps; 6,145 microfilms; 96,696 other microforms; 141,476 photos, pictures, and prints; 13,030 sound recordings; 94,623 slides; 667 film strips; 575 motion picture films; 105,326 uncataloged pamphlets; and 955,586 manuscripts.

The Library's facilities for undergraduate work are excellent, and strong collections for advanced study and research are being built in the various fields of liberal and professional scholarship. All of the books in the libraries of the institutions of the Oregon State System of Higher Education are available to the students and faculty of the University.

Some of the Library's resources of particular value for advanced study are: a collection of source materials on English life and letters in the seventeenth century; a collection of books, reports, and periodicals on English opinion and politics of the nineteenth century, including considerable material on English liberalism in its relation to public education; materials on the history of American education in the nineteenth century; a collection of pamphlets on the English corn laws; the Overmeyer Collection of published works on the Civil War; a collection of Balzaciana; unusually extensive and complete files of psychological periodicals; an extensive collection of Oregon and Pacific Northwest manuscripts, photographs, maps, pamphlets, books, and newspapers. The noncurrent records of the University of Oregon are deposited with the Library as University archives.

The Burgess Collection of manuscripts, incunabula, and rare books is the gift of Miss Julia Burgess, late professor of English at the University, and of friends of the institution.

The Ernest Haycox Memorial Library, housed in a special room in the Library, consists of books and other materials accumulated by the late Mr. Ernest Haycox, '23, for background and reference use during his twenty-five-year career as a writer.

The Douglass Room, established through a bequest from the late Matthew Hale Douglass, former librarian of the University, contains record and tape collections of music, poetry, plays, and speeches. The room has 72 individual listening positions with earphones, a group listening room for 70 persons, and 6 booths.

The Philip Brooks Memorial Library, the gift of Mrs. Lester Brooks, is a reference collection of standard sets of American and English authors; it is housed in a special room on the third floor of the Library building.

The Adelaide Church Memorial Room, a "browsing room" for recreational reading in the Erb Memorial Union, is operated as a department of the University Library. Collections maintained in this room include the Pauline Potter Homer Collection of fine editions, illustrated books, books with fine bindings, and examples of the work of private presses.

The Bureau of Government Research and Service Library, housed in Commonwealth Hall, contains books, pamphlets, and other materials dealing with problems of local government.

The Law Library, housed in Fenton Hall, contains complete case reports of the National Reporter System, complete state reports from Colonial times to the establishment of the Reporter System, a substantial collection of English and Canadian case law, compilations of state and Federal statute law, standard legal digests and encyclopaedias, etc. Its periodical collection includes about 300 titles. An excellent collection of publications relating to Oregon territorial and state laws includes an extensive file of Oregon Supreme Court briefs.

The Gertrude Bass Warner Memorial Library of books on the history, literature, life, and particularly the art of Oriental countries is the gift of Mrs. Warner.

The School of Architecture and Allied Arts has a reference collection in

Lawrence Hall. The collection includes the architecture library of the late Ion Lewis, Portland architect, given in 1929 by Mr. Lewis, and the library of William Whidden, given by his heirs.

The University Library issues a semiannual periodical, the **CALL NUMBER**, containing articles and notes of a broadly bibliographical nature, with special reference to its own collections.

Service. During the regular sessions the main Library is open on Mondays, Tuesdays, Wednesdays, and Thursdays from 8:00 a.m. to 11:00 p.m.; on Fridays from 8:00 a.m. to 10:00 p.m.; on Saturdays from 8:00 a.m. to 5:00 p.m.; and on Sundays from 2:00 to 10:00 p.m. The Reserve Book Room is open on Mondays, Tuesdays, Wednesdays, and Thursdays from 8:00 a.m. to 1:00 a.m.; on Fridays and Saturdays from 8:00 a.m. to 10:00 p.m.; on Sundays from 10:00 a.m. to 10:00 p.m. In addition, the Reserve Book Room is open until 1:00 a.m. on the two Fridays and Saturdays preceding final examinations. The General Library is open until 10:00 p.m. on the two Saturdays preceding final examinations, and opens at 10:00 a.m. on Sunday of examination week. During vacation periods the Library is open from 8:00 a.m. to 5:00 p.m. Books other than reference books and those especially reserved for use in the Library may be borrowed for a period of two weeks, with the privilege of renewal if there is no other demand. Library privileges are extended to all University students and staff members, and may be granted to other persons upon application.

Library Fines and Charges. The following regulations govern Library fines and charges:

(1) A fine of 25 cents per day is charged for each overdue book, recording, or other Library material other than reserve books and material circulated by special permission (maximum, \$10.00).

(2) The following fines are charged for violation of rules governing reserve books and material circulated by special permission: (a) for overdue books, 25 cents an hour or fraction thereof (maximum, \$10.00), until the material is returned or reported lost (a maximum charge of \$1.00 an hour may be made in case of flagrant violation of the rules); (b) for failure to return books to proper department desk, 25 cents.

(3) Books needed for use in the Library are subject to recall at any time. A maximum fine of \$1.00 a day may be imposed for failure to return promptly.

(4) Borrowers losing Library materials are charged: (a) the replacement cost of the material, (b) the amount of fine incurred up to the time the material is reported missing (maximum, \$10.00), and (c) a service charge of \$3.00 for each title.

(5) When a lost book, for which the borrower has been billed, is returned before a replacement has been ordered, a refund not exceeding the replacement cost may be made. In cases where a replacement has been ordered, any refunds to the borrower are at the discretion of the librarian.

Instruction. The University Library also offers a service course to acquaint students with its resources and to aid them in the use of these resources.

Unified Facilities. The library collections at the state institutions of higher education in Oregon have been developed to meet special needs on each campus; but the book stock of the libraries, as property of the state, circulates freely to permit the fullest use of all books. The libraries of the State System are in ready communication with each other via telephone. The library facilities of the several institutions are coordinated through a director of libraries. The current director is also the librarian of the University of Oregon.

Museums and Collections

MUSEUMS AND COLLECTIONS maintained at the University include the Miniature Wagon Museum, the Museum of Art and the Museum of Natural History. Art exhibits are also shown in the gallery on the second floor of the Student Union.

Museum of Art

*WALLACE S. BALDINGER, Ph.D.....	Director
RICHARD C. PAULIN, M.A.....	Assistant Director
MARK CLARK, M.F.A.....	Assistant Director (Exhibitions)
DENNIS A. GOULD, M.F.A.....	Assistant Director (for Statewide Services)

The Museum of Art, housing the Murray Warner Collection of Oriental Art and other University art collections, was erected in 1930. The building and the garden court adjoining it, both dedicated to the memory of Prince Lucien Campbell, fourth president of the University, were financed through gifts.

The Warner Collection was given to the University in 1921 by Mrs. Gertrude Bass Warner as a memorial to her husband, Major Murray Warner, with whom she had been collecting works of Oriental art from the time of their marriage in China in 1904 until his death in 1920. Mrs. Warner continued until her death in 1951 to augment and improve the collection and direct its exhibition. She also established a museum reference library for studies in Oriental art; the collection is now known as the Gertrude Bass Warner Memorial Library.

The Murray Warner Collection includes 3,196 accessioned objects, representing principally the cultures of China and Japan, but including some works of art from Korea, Cambodia, Mongolia, and Russia.

The Haseltine Collection of Pacific Northwest Art, currently being developed and placed on permanent loan to the Museum of Art, now comprises more than 150 paintings and sculptures.

The first-floor galleries of the Museum of Art are reserved for the showing of traveling exhibitions, the display of special study material, and exhibitions of Northwest artists. A program of statewide services which includes circulating exhibitions and acquisitions for the permanent collections, is financed principally through a Friends of the Museum organization; membership in it is open to the public.

Museum of Natural History

J. ARNOLD SHOTWELL, Ph.D.....	Director; Curator of Fossil Vertebrates
DAVID L. COLE, M.S.....	Curator of Anthropology
JANE GRAY, Ph.D.....	Curator of Palaeobotany
LEROY JOHNSON, JR., Ph.D.....	Assistant Curator of Anthropology
LAURENCE R. KITTLEMAN, Ph.D.....	Curator of Geology

The Museum of Natural History is primarily a research department devoted to studies of the history of the earth, plants, animals, and man as found in Oregon. The knowledge gained in these studies is made available to the public through displays, publications; a public-school loan program, a museum information service, and loans to other institutions. As a repository, the Museum of Natural History maintains large collections of fossils, plants, animals, rocks, and the objects used by primitive man.

In addition to storage and display areas, the Museum of Natural History has a preparation laboratory and shop, an archaeology laboratory, palaeoecology laboratories including facilities for the study of sedimentation and pollen, and drafting, illustration, and darkroom areas, for staff and graduate-student research.

The former Condon Museum of Geology and the Museum of Vertebrate Zoology are integrated into the Museum of Natural History. The anthropological collections are designated by state law as the Oregon State Museum of Anthropology.

The Herbarium of the Museum of Natural History maintains a large collection of plants of Oregon and the Northwest, including the Howell, Leiberg, Leach,

* On sabbatical leave 1967-68.

and Cusick collections. The palaeobotanical collections include fossil leaves and pollen from many localities. Tertiary fossil vertebrates represent all stages of the history of the fauna of Oregon. Skins and skeletons of mammals and birds are available for study. The artifacts of primitive man in Oregon are well represented in the large archaeological collections. The collections also include specimens illustrating the material culture of primitive peoples of many parts of the world. The collections are continually augmented through an intensive field program and gifts.

The displays of the museum are open to the public. Large groups should make appointments in advance to avoid congestion. During the academic year the museum is open Monday through Friday from 8:00 a.m. to 5:00 p.m. and in the summer from 8:00 a.m. to 4:30 p.m.

Miniature Wagon Museum

IVAN L. COLLINS

.....Director

The Miniature Wagon Museum, located in Erb Memorial Union, houses more than fifty miniatures of wagons, carriages, and other horse-drawn equipment used in America in the nineteenth and early twentieth centuries. The miniatures are authentic reproductions one-eighth actual size. Many of the wagons are displayed in recreated historical settings, including recorded sound effects of the era.

Reference works, photographs, and other research materials are available for study. Museum hours: Monday through Saturday, 9:00 a.m. to 5:00 p.m.; Sunday, 1:00 p.m. to 6:00 p.m.

Official Publications

THE 1932 LEGISLATIVE ACT placing all the Oregon state institutions of higher education under the control of one Board provided that all public announcements pertaining to the several institutions "shall emanate from and bear the name of the Department of Higher Education and shall be conducted in such a way as to present to the citizens of the state and prospective students a fair and impartial view of the higher educational facilities provided by the state and the prospects for useful employment in the various fields for which those facilities afford preparation." Official publications of the University of Oregon include:

University of Oregon Bulletin. The UNIVERSITY OF OREGON BULLETIN is published nine times a year by the State Board of Higher Education. Included in the BULLETIN are the official catalogs of the University and its several divisions.

University of Oregon Books. Scholarly studies published by the University appear under the imprint, UNIVERSITY OF OREGON BOOKS. Some studies also carry a serial designation, UNIVERSITY OF OREGON MONOGRAPHS.

Comparative Literature. COMPARATIVE LITERATURE, a quarterly journal, is published by the University of Oregon in cooperation with the Comparative Literature Section of the Modern Language Association of America.

Oregon Law Review. The OREGON LAW REVIEW is published quarterly under the editorship of the faculty of the School of Law as a service to the members of the Oregon bar and as a stimulus to legal research and productive scholarship on the part of students.

Oregon Business Review. The OREGON BUSINESS REVIEW is published monthly by the Bureau of Business and Economic Research. Its primary purpose is to report and interpret current business and economic conditions in Oregon and the Pacific Northwest.

Call Number. The CALL NUMBER is published semiannually by the University of Oregon Library. It contains articles and notes of a broadly bibliographical nature, with special reference to the Library's own collections.

Northwest Review. The NORTHWEST REVIEW, issued three times a year, is devoted to creative writing, art, criticism, and comment; the work of Pacific Northwest contributors is particularly welcome.

Northwest Folklore. NORTHWEST FOLKLORE, published semiannually, publishes research articles and notes, with special reference to the folklore of the Pacific Northwest.

Curriculum Bulletin. The Curriculum Bulletin is published ten times a year by the School of Education. Each issue presents a single topic of interest to school teachers and administrators.

Physical-Education Microcards. The University issues, through the School of Health, Physical Education, and Recreation, several microcard series in the fields of health, physical education, recreation, and related subjects. The series include dissertations, theses, and other unpublished research materials, and out-of-print scholarly books and periodicals.

Municipal Research Bulletins. The publications of the Bureau of Municipal Research and Service, intended primarily as a service to city officials in the state of Oregon, are issued in four series, INFORMATION BULLETINS, LEGAL BULLETINS, FINANCE BULLETINS, and SPECIAL BULLETINS, published for the most part in mimeographed form.

Academic Regulations

Admission

TO BE ADMITTED to the University of Oregon a student must be of good moral character and must present evidence of acceptable preparation for work at the college level. Every person wishing to earn credit in the regular sessions of the University must send to the Office of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) official transcripts of all high-school and college records.

Application and transcripts of records should be filed well before the applicant intends to enter the University; late filing may delay or prevent registration. If a student fails to submit the required documents in complete and satisfactory form, his admission and registration may be canceled. All records submitted, filed, and accumulated in the Admissions and Registrar's Offices become the property of the University.

Students planning to enter the University in the fall term should send their applications for admission to the Office of Admissions not later than August 31. A late-filing fee of \$10.00 is charged if applications are filed later than this date.

Admission to Freshman Standing

To be admitted to freshman standing in the University, a student must be a graduate of a standard or accredited high school and, in addition, meet certain qualitative educational standards. The qualitative requirements for residents of Oregon differ from those for nonresident students:

Resident Students. To be eligible for admission with freshman standing in the fall term, a student who is a resident of Oregon must: (1) have a 2.25 grade-point average in all high-school subjects taken for graduation; or (2) attain a satisfactory score (887) on the College Entrance Examination Board Scholastic Aptitude Test; or (3) achieve a GPA of 2.00 on either nine term hours of a structured program or twelve term hours of elective course work in a regular, accredited collegiate summer session. The structured nine-unit load must include a course in English composition and two or more courses from the fields of humanities, social science, or science.

To be eligible for admission on the basis of high-school grades in the winter or spring terms, a resident student must have a high-school GPA of 2.00 or a satisfactory score (880) on the Scholastic Aptitude Test.

Nonresident Students. To be eligible for admission with freshman standing, a student who is not a resident of Oregon must: (1) have a 2.75 grade-point average in all high-school subjects taken for graduation; or (2) have a 2.25 high-school GPA combined with a satisfactory score on the Scholastic Aptitude Test; or (3) achieve a GPA of 2.25 on either nine term hours of a structured program or twelve term hours of elective course work in a regular, accredited collegiate summer session. The structured nine-unit load must include a course in English composition and two or more courses from the fields of humanities, social science, or science.

Early Admission. A high-school student who is a resident of Oregon, has a cumulative GPA of 2.50 or a Scholastic Aptitude Test score of 950 at the end of the first half of his senior year, and is recommended by his high-school principal will be granted admission to the University before graduation. On application to the

Director of Admissions a nonresident high-school student will be granted admission before graduation on the basis of a 3.00 GPA or a 2.50 GPA and a Scholastic Aptitude Test score of 1,000 at the end of the first half of his senior year. Enrollment in the University after early admission is contingent on graduation from high school and submission of a complete high-school transcript.

Credentials. A student applying for admission to freshman standing must send to the Office of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) records of all school work taken beyond the eighth grade, certified by the proper school official on the official form used by his high school for this purpose; and (4) certified results of the following College Entrance Examination Board tests: (a) Scholastic Aptitude Test, (b) achievement test in English composition, (c) achievement test in level I mathematics, and (d) achievement test in a foreign language, if he has studied a foreign language for two years in high school.* See also ENTRANCE EXAMINATIONS, page 89.

Scores on the College Entrance Examination Board tests are used primarily as a basis for advising and placement. As indicated above, however, students may satisfy the University's qualitative standards for admission through a satisfactory score on the Scholastic Aptitude Test.

Advanced Placement Program. Students who have completed college-level studies in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board, and who have received satisfactory grades in examinations administered by the Board, may be granted credit toward a bachelor's degree in comparable University courses on admission to freshman standing. For further information, see page 134.

Admission of Transfer Students

Transfer students are persons admitted to the University of Oregon after having been registered in any other institution of collegiate grade or in a department or center of extension work, including the Division of Continuing Education of the Oregon State System of Higher Education.

A transfer student must present evidence that he was in good standing when he left the college or university previously attended, and must meet certain qualitative standards of scholastic attainment. The qualitative requirements for residents of Oregon differ from the requirements for nonresidents: resident students—a grade-point average of 2.00 covering all previous college work; non-resident students—a GPA of 2.25. Students who present fewer than 12 term hours of collegiate credit must meet the requirements for freshman standing.

The amount of transferred credit granted depends upon the nature and quality of the applicant's previous work, evaluated according to the academic requirements of the University. Records from fully accredited institutions are evaluated before admission is granted.

Credit transferred from an accredited junior college may be counted only as a part of the first 93 term hours earned toward a baccalaureate degree.

No advanced standing is granted at entrance for work done in nonaccredited collegiate institutions. However, after three terms of satisfactory work in the University, an undergraduate student transferring from a nonaccredited institution may, on petition, receive credit in University of Oregon courses to which courses taken at the unaccredited institution are approximately equivalent; validating examinations may be required. Petitions for such credit may be based only on regularly organized college-level courses.

* Information concerning scheduled test dates and the location of testing centers may be obtained from high-school counselors or from the College Entrance Examination Board, Box 592, Princeton, N.J., or 1947 Center St., Berkeley, Calif.

Transfer students must send to the Office of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) complete official records of all school work beyond the eighth grade; and (4) a certified score on the College Entrance Examination Board Scholastic Aptitude Test. College records must be certified by the registrar of the institution providing the record; if the student's high-school record is adequately shown on his college transcript, he need not obtain another record direct from his high school. If a student has taken the Scholastic Aptitude Test on a previous occasion, he need not take it again, but may obtain and submit a transcript of his score from the College Entrance Examination Board.

Admission to Major Programs. Several University schools and departments have special requirements for the admission of transfer students as majors and for the granting of transfer major credit—in addition to the general requirements of the University. These requirements are frequently set in accordance with the standards of national professional accrediting organizations. Where there are such special requirements, they are stated in school and department sections in this Catalog.

Admission of Special Students

An applicant may experience difficulty in obtaining complete and official credentials to document his application. When such deficiencies or irregularities of credentials prevent proper classification, the Director of Admissions may admit the applicant as a special student.

The Director may also, with the concurrence of the Scholastic Deficiencies Committee and the dean of the college or school in which the applicant wishes to study, admit as a special student an undergraduate who is a resident of Oregon and who does not meet regular admission requirements. Exceptions to admission requirements for nonresident undergraduates require the approval of a faculty committee. Special-student status is not granted to an upper-division applicant with less than a 2.00 GPA.

A special student should qualify for regular standing as soon as possible, by satisfactory University work and by the removal of any entrance deficiencies; if his grades when admitted were below a C average, he must raise his cumulative average to that level before being granted regular standing. A student may not continue for more than 45 term hours of University work under special-student classification without explicit permission (which is seldom granted). A special student may earn credits toward a degree; to qualify for a degree, however, he must complete at least 45 term hours of work after he has been granted regular standing. (In case a regular student changes to special status, work done while he is a special student will not apply toward a degree.)

Admission to Graduate Standing

For requirements and procedures for admission to graduate study see GRADUATE SCHOOL, page 113 ff.

Entrance Examinations

TO PROVIDE THE FACULTY with a basis for reliable advice and assistance to students in planning their programs and, in certain cases, for determination of eligibility for enrollment, the University requires all entering undergraduate students to submit certified scores on the College Entrance Examination

Board Scholastic Aptitude Test; freshman students are required to submit, in addition, scores on the College Board achievement tests in the following fields: English composition, level I mathematics, a foreign language (if the student has studied a foreign language for two years in high school).

It is important that students whose eligibility for enrollment may be determined in part by test scores take these examinations no later than the College Board's March or May test dates. All entering students are expected to take the tests before they arrive on the campus; however, students whose scores will be used for counseling purposes only may apply to the University Counseling Center for permission to take the tests at a special campus administration.

All entering students, undergraduate and graduate, are also required to take a physical examination and provide evidence of immunization to certain contagious diseases (see page 107). The physical examination is given by a physician chosen by the student, who provides an examination report to the University Student Health Service.

Degrees

WHEN REQUIREMENTS for degrees are changed, special arrangements may be made for students who have taken work under the old requirements. In general, however, a student will be expected to meet the requirements in force at the time he plans to receive a degree. The University grants the following degrees:

Honors College—B.A. (Honors College).

Liberal Arts—B.A., B.S., M.A., M.S., M.F.A., Ph.D.

Architecture and Allied Arts—B.A., B.S., B.Arch., B.I.Arch., B.L.A., B.F.A., M.A., M.S., M.Arch., M.F.A., M.L.A., M.U.P.

Business Administration—B.A., B.S., B.B.A., M.A., M.S., M.B.A., D.B.A.

Community Service and Public Affairs—B.A., B.S.

Dentistry—M.S., D.M.D.

Education—B.A., B.S., B.Ed., M.A., M.S., M.Ed., D.Ed., Ph.D.

Health, Physical Education, and Recreation—B.A., B.S., B.P.E., M.A., M.S., D.Ed., Ph.D.

Journalism—B.A., B.S., M.A., M.S.

Law—B.A., B.S., J.D.

Librarianship—M.L.S.

Medicine—M.A., M.S., Ph.D., M.D.

Music—B.A., B.Mus., M.A., M.Mus., D.M.A.

Nursing—B.A., B.S., M.S.

The M.A. and M.S. degrees are also granted on the completion of programs of interdisciplinary studies.

Requirements for Bachelor's Degree

Requirements for a bachelor's degree include (a) lower-division requirements (which the student is expected to satisfy during his freshman and sophomore years) and (b) general requirements which must be satisfied before the degree is conferred.

Lower-Division Requirements. The lower-division requirements for a bachelor's degree are as follows:

(1) Written English:

English Composition (Wr 121, 122, 123), 9 term hours. (With the consent of the head of the Department of English, all or part of this requirement may be waived for students who demonstrate superior ability in writing.) Prerequisite to this course, for freshmen with low ratings on the entrance placement examination, may be Corrective English (Wr 10) offered through the Division of Continuing Education.

(2) Physical education: 5 terms in activity courses (normally PE 180 or PE 190) unless excused. (One or more terms of this requirement may be waived on the basis of proficiency examinations.) Students who have completed six months of active military service in the Armed Forces of the United States are exempt from 3 terms of the physical-education requirement; to qualify for exemption, such students must file official documentary evidence of their service.

(3) Health education: HE 150 or HE 250. (This requirement may be waived on the basis of a proficiency examination.)

(4) Group requirement—see pages 92-94.

(5) Grade-point average on completion of 93 hours of work: minimum, 2.00.

General Requirements. The general requirements for a bachelor's degree are as follows:

(1) Total credit:

(a) For B.A., B.S., B.B.A., B.Ed., B.P.E., or B.Mus. degree: minimum, 186 term hours.

(b) For B.Arch., B.F.A., B.I. Arch., or B.L.A. degree: minimum, 220 term hours.

(2) Work in upper-division courses: minimum, 62 term hours.

(3) Work in the major:

(a) Minimum: 36 term hours, including at least 24 hours in upper-division courses.

(b) Any additional requirements of the major school or department (satisfaction must be certified by the dean or department head).

(4) Work in residence: minimum, 45 term hours of the last 60 presented for the degree, not over 9 of which may be optional no-grade credits. Only University of Oregon work completed on the Eugene campus of the University or at the Medical School, the Dental School, or the School of Nursing in Portland may be counted for the satisfaction of this requirement. Work in Continuing Education courses is not work in residence.

(5) For the B.A. degree, work in language and literature: 36 term hours,*

* For the purpose of determining distribution of hours for the B.A. or B.S. degree, the instructional fields of the College of Liberal Arts are classified as follows:

Language and Literature: General Arts and Letters, Classics, and Chinese and Japanese, English, German and Russian, Romance Languages, Speech.

Social Science: General Social Science, Anthropology, Economics, Geography, History, Home Economics, Philosophy, Political Science, Psychology, Religious Studies, Sociology.

Science: General Science, Biology, Chemistry, Geology, Mathematics, Nursing, Physics.

including attainment of proficiency in a foreign language equivalent to that attained at the end of two years of college study of the language.*

- (6) For the B.S. degree, work in science or in social science: 36 term hours.†
- (7) Restrictions:
 - (a) Correspondence study: maximum, 60 term hours.
 - (b) Law, medicine, dentistry: maximum, 48 term hours in professional courses toward any degree other than a professional degree.
 - (c) Performance (individual study): maximum for all students except music majors, 12 term hours; maximum for music majors toward the B.A. degree, 24 term hours—of which not more than 12 hours may be taken in the student's freshman and sophomore years.
 - (d) No-grade courses: minimum of 150 term hours in graded courses.
- (8) Grade-point average:
 - (a) Covering all graded college work: minimum, 2.00.
 - (b) Covering all graded work taken at the University of Oregon: minimum, 2.00.

The occasional student who wishes to earn a second bachelor's degree must satisfy the requirements listed above and, in addition, must earn at least 36 term hours in courses on the Eugene campus beyond all requirements for the first degree (45 hours if his first degree was not granted by the University of Oregon).

Advanced Degrees

The requirements for graduate degrees are listed under GRADUATE SCHOOL. The requirements for the degree of Doctor of Jurisprudence are listed under SCHOOL OF LAW. The requirements for the degree of Doctor of Medicine are listed in the Medical School Catalog, the requirements for the degree of Doctor of Dental Medicine in the Dental School Catalog.

Application for Degree

All students who intend to receive a degree from the University must make application by filing the proper form in the Registrar's Office, at least four weeks in advance of the expected graduation date; late application will delay graduation. All University academic and financial obligations must be satisfied before any degree will be conferred.

Group Requirement

TO INSURE breadth of liberal education, all candidates for a bachelor's degree are required to complete work selected from restricted lists of sequences in each of three groups—arts and letters, social science, science. Courses which may be taken for the satisfaction of the group requirement are numbered 100 to 120, 200 to 220, and 300 to 310. The requirement, for majors in the College of Liberal Arts and for majors in the professional schools, is as follows:

* The language requirement for the B.A. degree may be met in any one of the following ways: (1) two years (normally 24 term hours) of college work in a foreign language; (2) one year of college work at the second-year or higher level; or (3) examination, administered by the appropriate department, showing language competence equivalent to that attained at the end of two years of college study. The requirement may not be met by examination after the completion of a student's junior year.

† See note (*) p. 91.

Majors in liberal arts—(a) one sequence numbered 100-120 or 200-220 in each of the three groups; (b) an additional sequence numbered 100-120, 200-220, or 300-310 in *each* of the three groups.

Majors in professional schools—(a) one sequence numbered 100-120 or 200-220 in each of the three groups; (b) an additional sequence numbered 100-120, 200-220, or 300-310 in *any one* of the three groups.

At least one sequence selected for the satisfaction of the arts and letters group requirement must be a sequence in literature.

Each of the group sequences must total at least 9 term hours; each sequence in the science group must include laboratory work or total 12 term hours, except that the second sequence for Liberal Arts majors may be 9 hours only.

When two sequences are taken in social science or in science for the satisfaction of the requirement, the sequences must be in different departments.

Enrollment in group sequences designated "H.C." is restricted to students in the Honors College.

Sequences which may be taken for the satisfaction of the group requirement are listed below:

Arts and Letters Group

General Arts and Letters

- Literature (H.C.) (AL 101, 102, 103)
- *Intro. to Jap. Lit. (AL 301, 302, 303)
- *Lit. of Ancient World (AL 304, 305, 306)
- *Intro. to Chinese Lit. (AL 307, 308, 309)
- *Intro. to Germanic Lit. (AL 310, 311, 312)

Art

- †Survey of Vis. Arts (ArH 201, 202, 203)
or Hist. of Western Art (ArH 204, 205, 206)
- †Hist. of Oriental Art (ArH 207, 208, 209)

English

- Survey of Eng. Lit. (Eng 101, 102, 103)
or Intro. to Lit. (Eng 104, 105, 106) or
World Lit. (Eng 107, 108, 109)
- Shakespeare (Eng 201, 202, 203)
- *Three terms chosen from: Tragedy (Eng 301), Epic (Eng 303), Comedy (Eng 304), Satire (Eng 305), Lit. of the English Bible (Eng 306, 307)

Foreign Languages

- †Intro. to Homer (CL 101, 102), Intro. to
to Plato (CL 103)
- Cicero's Orations (CL 104), Virgil's
Aeneid (CL 105), Terence (CL 106)
- †2nd Yr. German (GL 101, 102, 103)

Foreign Languages (continued)

- †2nd Yr. Norwegian (GL 104, 105, 106)
- †2nd Yr. Swedish (GL 107, 108, 109)
- †2nd Yr. Chinese (OL 101, 102, 103)
- †2nd Yr. Japanese (OL 104, 105, 106)
- †2nd Yr. French (RL 101, 102, 103)
- †2nd Yr. Italian (RL 104, 105, 106)
- †2nd Yr. Spanish (RL 107, 108, 109)
- †2nd Yr. Russian (SL 101, 102, 103)
- Read. in Russian Lit. (SL 201, 202, 203)
- *Livy (CL 301), Virgil's Eclogues &
Georgics (CL 302), Horace's Odes (CL
303)
- *Survey of German Lit. (GL 301, 302, 303)
- *Survey of French Lit. (RL 301, 302, 303)
- *Survey of Spanish Lit. (RL 304, 305, 306)
- *Survey of Italian Lit. (RL 307, 308, 309)

Music

- †Intro. to Music & Its Lit. (Mus 201, 202,
203) or History of Music (Mus 204,
205, 206)

Philosophy

- †Hist. of Ancient Phil. (Phl 301, 302, 303)
- †Hist. of Modern Phil. (Phl 304, 305, 306)

Speech

- †Theory & Lit. of Rhetoric (Sp 301, 302,
303)

Social Science Group

General Social Science

- Soc. Sc. & Soc. Policy (SSc 104, 105,
106)
- Intro. to Soc. Sc. (H.C.) (SSc 201, 202,
203)

Anthropology

- Gen. Anthropology (Anth 101, 102, 103)
- Intro. to Cult. Anth. (Anth 207, 208, 209)
- *Society & Culture (Anth 301, 302, 303)

Economics

- Principles of Econ. (Ec 201, 202, 203)

Geography

- Intro. Geography (Geog 105, 106, 107)
- World Regional Geog. (Geog 201, 202,
203)
- *Geog. of Oregon (Geog 301), Geog. of
North America (Geog 302, 303)

* Courses numbered 300-310 satisfy only second-sequence requirements.

† Courses marked with a dagger (†) do not satisfy the "literature" requirement in arts and letters.

‡ Courses marked with a double dagger (‡) satisfy only second-sequence requirements and do not satisfy the "literature" requirements in arts and letters.

History

- Hist. of West. Civiliz. (Hst 101, 102, 103)
- History (H.C.) (Hst 107, 108, 109)
- Hist. of U.S. (Hst 201, 202, 203)
- *Europe since 1789 (Hst 301, 302, 303)
- *English History (Hst 304, 305, 306)

Philosophy

- Problems of Phil. (Phl 201, 202, 203)
- Intro. to Phil. (H.C.) (Phl 207, 208, 209)
- *Social & Pol. Phil. (Phl 307, 308, 309)

Political Science

- American Govts.: Concepts & Inst. (PS 100), Intro. to Pol. Sc. (PS 207, 208)
- American Govts.: Concepts & Inst. (PS 100), American Govts. (PS 202, 203)
- American Govts.: Concepts & Inst. (PS 100), American Govts. (PS 202), International Relations (PS 205)

Psychology

- Learning & Thinking (Psy 211) or Perception (Psy 212); Motivation & Physiological Psych. (Psy 214) or Social Psych. (Psy 215); Human Develop. & Individual Diff. (Psy 217) or Personality (Psy 218)

Religion

- Great Religions (R 201, 202, 203)
- *Religions of Mankind (R 301, 302, 303)

Sociology

- Gen. Sociology (Soc 204, 205, 206)
- *Princ. of Sociology (Soc 300; and two courses chosen from: American Society (Soc 301), World Population & Soc. Structure (Soc 303), The Community (Soc 304), Contemporary Social Problems (Soc 305)

Science Group**General Science**

- Physical Sc. Survey (GS 104, 105, 106)
- Physical Sc. (H.C.) (GS 204, 205, 206)

Biology

- Gen. Biology (Bi 101, 102, 103)
- Biological Sc. (H.C.) (Bi 104, 105, 106)
- †Cell Biology (Bi 301, 302, 303)
- †Biology of Organisms (Bi 304, 305, 306)

Chemistry

- Elementary Chem. (Ch 101, 102, 103)
- †General Chem. (Ch 104, 105, 106); and a minimum of two terms of lab.
- †General Chem. (Ch 204, 205, 206); and a minimum of two terms of lab.

Geology

- Gen. Geology (Geol 101, 102, 103)
- §Geologic Hist. of Life (Geol 301, 302, 303)

Mathematics

- Intro. College Math. (Mth 104, 105, 106)
- Intro. College Math. (Mth 104, 105), Calculus with Analytic Geometry (Mth 200)
- Intro. College Math. (Mth 104 or Mth 105), Calculus with Analytic Geometry (Mth 200, 201)

Mathematics (continued)

- Precalculus Math (Mth 115), Calculus with Analytic Geometry (Mth 200, 201)
- Precalculus Math (Mth 115), Analytic Geometry & Calculus (Mth 204, 205)
- Calculus with Analytic Geometry (Mth 200, 201, 202 or Mth 201, 202, 203)
- Fund. of Math. (H.C.) (Mth 107, 108, 109)
- Analytic Geometry & Calculus (Mth 204, 205, 206)

Physics

- Essentials of Physics (Ph 101, 102, 103); and Gen. Physics Lab. (Ph 204, 205, 206)
- Descriptive Astronomy (Ph 104, 105, 106)
- General Physics (Ph 201, 202, 203)

Psychology

- Learning & Thinking (Psy 211 or Perception (Psy 212); Motivation & Physiological Psych. (Psy 214), or Social Psych. (Psy 215); Human Develop. & Individual Diff. (Psy 217) or Personality (Psy 218); and Psych. Lab. (Psy 213, Psy 216, Psy 219)

Honors

THE UNIVERSITY OF OREGON offers special programs of study as a challenge to students of superior scholastic ability, and provides official recognition for students completing regular degree programs with outstanding scholastic

* Courses numbered 300-310 satisfy only second-sequence requirements.

† May be offered for the satisfaction of either the lower-division or upper-division science group requirement by majors in the College of Liberal Arts, primarily to meet the requirements of general science majors.

‡ Courses which may be taken with General Chemistry to satisfy the laboratory requirement include: Introductory Chemistry Laboratory (Ch 107); Introductory Analytical Chemistry I (Ch 108); Introductory Analytical Chemistry II (Ch 109); Semi-micro Inorganic Qualitative Analysis (Ch 207); Volumetric Analysis (Ch 208); Gravimetric Analysis (Ch 209).

§ May be offered for the satisfaction of the science group requirement only by majors in the College of Liberal Arts.

records. Recognition of outstanding scholarship is also provided through election to membership in several honor societies.

Honors College. The University of Oregon Honors College offers a four-year program of study leading to the degree of Bachelor of Arts (Honors College). For further information, see page 130 ff.

Recognition for High Scholarship. Candidates for the bachelor's degree who achieved a cumulative grade-point average of 3.75-4.00 receive the award of "Recognition for Highest Scholarship"; candidates who achieve a cumulative grade-point average of 3.50-3.74 receive the award of "Recognition for High Scholarship."

Master's Degree with Honors. Candidates for the master's degree who pass a final examination with exceptional merit may, by vote of the examining committee, be awarded the degree with honors.

Honor Societies. University of Oregon chapters of several national scholastic honor societies recognize exceptional distinction in scholarship through election to membership. Among these societies are: Phi Beta Kappa (liberal arts), Sigma Xi (science), Order of the Coif (law), Kappa Tau Alpha (journalism), Beta Gamma Sigma (business administration), Pi Kappa Lambda (music), Alpha Lambda Delta (freshman women), Phi Eta Sigma (freshman men).

Academic Procedure

THE REGULAR ACADEMIC YEAR throughout the Oregon State System of Higher Education is divided into three terms of approximately twelve weeks each. The summer session supplements the work of the regular year (see special announcements). Students may enter at the beginning of any term. It is important that freshmen and transferring students entering in the fall term be present for New Student Week (see page 103). A detailed calendar for the current year will be found on pages 8-9.

Students are held responsible for familiarity with University requirements governing such matters as routine of registration, academic standards, student activities, organizations, etc. Complete academic regulations are included each year in the separately published Time Schedule of Classes, a copy of which is furnished each student at registration.

When regulations are changed, the changed regulations are effective on the date of their publication, unless a later date is indicated on publication.

Registration Procedure

A registration period is set aside, with published dates, preceding the beginning of classes in each term or session. Complete registration instructions are contained in the Time Schedule. Students are officially registered and entitled to attend classes only when they have completed the prescribed procedures, including the payment of term fees.

Students are advised to register in person if possible. However, registration in absentia may be arranged by the student, in cases where his presence is not possible and where proxy registration is feasible.

Students planning to register in a term of the regular academic year after absence of a term or more or after earning a degree or after attending only a summer session should notify the Registrar's Office by filing a re-enrollment card several weeks before registration, in order to allow time for the preparation of registration materials. If notice is not given, registration will be delayed, and the student may become subject to penalties.

All regular students are required to file official transcripts of any academic work taken at other institutions since their first enrollment in the University; a student's official records must be kept complete at all times. Exceptions are made only for "special" and "provisional" students who are formally admitted under individual arrangements, and for summer "transient" students, who are not formally evaluated and admitted. Any failure to file all required records is considered a breach of ethics, and may result in the cancellation of admission, registration, and credits.

Academic Advising

Academic advising is regarded by the University as an extension of the teaching function and, therefore, as an important responsibility of the faculty. Academic advisers attempt to communicate to students, particularly freshmen, the meaning of higher education and its significance to the student. Advisers also explain University academic requirements and assist individual students in building programs which satisfy these requirements.

The Office of Academic Advising coordinates a general program of advising in which each student is assigned a faculty adviser, who normally teaches in the student's major field. The student must have his program reviewed at least annually by his adviser, and should consult with his adviser whenever he has academic problems.

Advisers for all students who have chosen a field of major study are assigned by major schools and departments; advisers for other students, by the Office of Academic Advising.

Definitions

A TERM HOUR represents three hours of the student's time each week for one term. This time may be assigned to work in classroom or laboratory or to outside preparation. The number of lecture, recitation, laboratory, or other periods required per week for any course may be found in the Time Schedule of Classes published each term.

A COURSE is a subject, or an instructional subdivision of a subject, offered through a single term.

A YEAR SEQUENCE consists of three closely articulated courses extending through the three terms of the academic year.

A CURRICULUM is an organized program of study arranged to provide integrated cultural or professional education.

Course Numbering System

Courses in University of Oregon catalogs are numbered in accordance with the course numbering plan of the Oregon State System of Higher Education. The plan, as it applies to University courses, is as follows:

- 1- 49. Remedial courses which carry no credit toward a degree.
- 50- 99. Beginning courses in subjects taught in high school which carry credit toward a bachelor's degree.
- 100-299. Lower-division courses.
 - 100-120, 200-220. Survey or foundation courses which satisfy the group requirement.
- 300-499. Upper-division courses.
 - 300-310. Upper-division courses which satisfy the group requirement.
 - 400-470. Upper-division courses which may be taken through successive terms under the same number, credit being granted according to the amount of work

done. Certain numbers in this bracket are reserved for special types of work: 401, Research or other supervised original work; 403, Thesis; 405, Reading and Conference;* 407, Seminar.

400-499, with designation (G) or (g). Upper-division courses which may be taken for graduate credit. Courses which may be taken for graduate *major* credit are designated (G); courses which may be taken for graduate *minor or service-course* credit only are designated (g).

500-599. Graduate courses. Seniors of superior scholastic achievement may be admitted to 500 courses on the approval of the instructor.

500-510. Graduate courses which may be taken through successive terms under the same number, credit being granted according to the amount of work done. Certain numbers in this bracket are reserved for special types of work: 501, Research or other supervised original work;† 503, Thesis;† 505, Reading and Conference; 507, Seminar.

500-599, with designation (p). Courses in a professional field offered at a level of intellectual maturity suitable for graduate students who have earned a bachelor's degree in a field other than their graduate professional field.

600-699. Courses of a highly professional or technical nature, which count toward a professional degree only (not toward advanced academic degrees such as M.A., M.S., Ph.D.).

Grading System

The quality of student work is measured by a system of grades, points, and grade-point averages.

Grades. Student work is graded as follows: A, exceptional; B, superior; C, average; D, inferior; F, failed; INC., incomplete; W, withdrawn. Students ordinarily receive one of the four passing grades or F. When the quality of the work is satisfactory, but some minor yet essential requirement of the course has not been completed, for reasons acceptable to the instructor, a report of INC may be made and additional time (normally not more than three terms) granted for completion of the work. Students may withdraw from a course by filing the proper forms in the Registrar's Office in accordance with University regulations.

MARKS OF PASS-NO PASS. Under certain conditions, student work may be entered in University records with a mark of "pass" (P) or "no pass" (N). Marks of P and N are disregarded in the computation of the student's grade-point average. For a bachelor's degree, a student must receive at least 150 term hours of credit with grades.

Credit with a mark of P is granted: (1) for courses offered only on a no-grade basis and so designated in the Catalog; (2) for any University course at the option of the student, provided that the pass-no pass option is not contrary to the policy of the division offering the course; (3) for courses in which the student receives credit by examination (including advanced-placement credit and credit through examinations administered by the University); (4) for work taken at another collegiate institution, in cases where the Director of Admissions is unable to evaluate the specific quality of the work in terms of the University grading system.

Pass-No Pass Option. A student who wishes to exercise the pass-no pass option in any course must do so at the time of registration. As stated above, the option is open to a student only if it is not contrary to the policy of the division offering the course. Courses open to the pass-no pass option are so designated in the Schedule of Classes. In satisfying the 45-hour residence requirement for a bachelor's degree, a student must complete at least 36 term hours of work with grades or in courses offered only on a no-grade basis. Acceptability of credit earned with a mark of P toward the satisfaction of major requirements is determined by the school, department, or committee directing the major pro-

* Only students eligible for honors work may register for Reading and Conference (405).

† In all divisions except the School of Law, Research (501) and Thesis (503) are classified as no-grade courses (see below).

gram—this provision applies to any specific course required for the completion of a major, whether or not the course is taught in the division directing the major program.

Grade-Point Average. Grade points are assigned in relation to the level of the grade given, as follows: A, 4 points per term hour; B, 3 points per term hour; C, 2 points per term hour; D, 1 point per term hour; F, 0 points per term hour. The grade-point average (GPA) is the quotient of total points divided by total term hours for which grades are received. Marks of Inc, W, P, and N are disregarded in the computation of the grade-point average.

Credit by Examination

On petition to the Academic Requirements Committee, a student may be permitted to take examinations in undergraduate courses in which he is not enrolled, and receive credit in the courses on the basis of successful performance in the examinations. The rules governing credit by examination are as follows:

(1) The student's petition must have the approval of the dean or head of the division offering the course.

(2) Arrangements for the examination must be completed at least one month before the examination date.

(3) The student must pay, in advance, a special-examination fee of \$3.00 per credit hour.

(4) A student is allowed only one opportunity to qualify for credit by examination in any given course.

(5) Credit by examination is recorded with a mark of "pass" (P), and may not be counted toward the satisfaction of the residence requirement.

(6) Credit by examination may be earned only in courses whose content is identified by title in the University of Oregon Catalog; credit by examination may not be earned for research (401), thesis (403), reading and conference (405), or seminars (407), in laboratory courses or courses including laboratory work, or in courses in which practice is an essential part.

(7) A student may not receive credit by examination in courses (a) in which he has previously enrolled and failed, at the University of Oregon or elsewhere, (b) which would substantially duplicate credit which he has already received, (c) which are more elementary than courses in which he has previously received credit, or (d) which are at the lower-division level in his native language other than English. For good cause, and with the approval of the head of the division offering a course, the Academic Requirements Committee may allow exceptions to the provisions of rule (7).

Students may also receive credit by examination in certain courses through the Advanced Placement Program (see page 134). Honors College students who have prepared for comprehensive honors examinations through independent study may receive credit in honors courses on the basis of these examinations (see pages 130-131).

Scholarship Regulations

The administration of the regulations governing scholarship requirements is vested in the Committee on Scholastic Deficiency of the faculty. This committee may disqualify a student from attending the University when it appears that his work is of such character that he cannot continue with profit to himself and with credit to the University. In general, profitable and creditable work means substantial progress toward meeting graduation requirements. Any term or cumulative

grade-point average below 2.00 is considered unsatisfactory, and may bring the student's record under review by the committee. Further details on committee procedures are published each year in the Time Schedule of Classes.

Fees and Deposits

STUDENTS AT THE UNIVERSITY OF OREGON,* Oregon State University, and Portland State College pay the same fees. In the fee schedule printed below, regular fees are those paid by all students under the usual conditions of undergraduate or graduate study; regular fees are payable in full at the time of registration. Special fees are paid under the special conditions indicated.

The Board of Higher Education reserves the right to make changes in the fee schedule without notice.

Payment of the stipulated fees entitles all students enrolled for academic credit (undergraduate and graduate, full-time and part-time) to all services maintained by the University for the benefit of students. These services include: instruction in University courses;† use of the University Library; use of laboratory and course equipment and materials in connection with courses for which the student is registered; medical attention at the Student Health Service; use of gymnasium equipment (including gymnasium suits and laundry service); a subscription to the student daily newspaper; admission to athletic events; admission to concert and lecture series sponsored by the University. No reduction in fees is made to students who may not desire to take advantage of some of these privileges.

The 1968-69 fee schedule is as follows:

Regular Fees

Undergraduate Students. Undergraduate students who are residents of Oregon and who are enrolled for a total of 8 term hours of work or more during the regular academic year pay tuition and fees totaling \$123.00 a term or \$369.00 for the three-term academic year.

Undergraduate students who are not residents of Oregon and who are enrolled for a total of 8 term hours of work or more during the regular academic year pay, in addition, a nonresident fee of \$210.00 a term, or a total of \$333.00 a term or \$999.00 for the three-term academic year. For regulations governing the assessment of the nonresident fee, see page 101.

Graduate Students. Graduate students enrolled for a total of 8 term hours of work or more pay tuition and fees totaling \$143.00 a term; students employed as teaching or research assistants pay a reduced fee of \$35.00 a term. Graduate students do not pay a nonresident fee.

Part-Time Students. Undergraduate or graduate students who enroll for 7 term hours of work or less pay a special part-time fee (see SPECIAL FEES, below).

Deposits

All persons who enroll for academic credit (except staff members) must make a general deposit of \$25.00, payable once each year at the time of first registration. The deposit is required for protection of the University against loss of or damage

* Except students at the Medical School, the Dental School, and the School of Nursing. The fee schedules for these students are published in the separate catalogs of these schools.

† Special fees, in addition to regular fees, are charged for individual instruction in musical performance. See SCHOOL OF MUSIC.

to institutional property such as dormitory and laboratory equipment, military uniforms, Library books, and locker keys, and against failure to pay promptly nominal fines and assessments, such as Library fines, campus traffic fines, and Health Service charges. If at any time charges against this deposit become excessive, the student may be called upon to re-establish the original amount.

The student may pledge the balance of his general deposit for the support of student activities.

Special Fees

The following special fees are paid by University students under the conditions indicated:

Part-Time Feeper term, \$31.00 to \$108.50

Students (undergraduate or graduate) who enroll for 7 term hours of work or less pay, instead of regular registration fees, a part-time fee in accordance with the following scale; 1-2 term hours, \$31.00; 3 term hours, \$46.50; 4 term hours, \$62.00; 5 term hours, \$77.50; 6 term hours, \$93.00; 7 term hours, \$108.50. Students enrolled for 7 term hours or less do not pay the nonresident fee. Payment of the part-time fee entitles the student to all services maintained by the University for the benefit of students.

Staff Feeper term hour, \$3.00

With the approval of the President's Office, staff members enrolled in University courses pay a special staff fee of \$3.00 per term hour. Full-time staff members (academic or civil service) may enroll under this fee for a limited amount of work for credit, generally for not more than 3 term hours of work in any term; staff members employed half-time or more, but less than full-time, may enroll under this fee for a maximum of 10 term hours of work.

Auditor's Feeper term, \$31.00 to \$123.00

An auditor is a person who has obtained permission to attend classes without receiving academic credit; such a person is not considered an enrolled student. Auditors attending classes carrying a total credit of 8 term hours or more pay a fee of \$123.00 a term; auditors attending classes carrying a total credit of 7 term hours or less pay fees in accordance with the part-time fee scale (see above).

Application Fee\$10.00

See page 87.

Late-Registration Feeminimum, \$5.00

A full-time student who registers after the scheduled registration dates of any term pays a late-registration fee of \$5.00 for the first late day plus \$1.00 for each late day thereafter.

Change-of-Program Fee\$1.00

A student may be required to pay this fee for each change in his official program.

Reinstatement Fee\$2.00

If for any reason a student has his registration canceled during a term for failure to comply with the regulations of the institution, but is later allowed to continue his work, he must pay the reinstatement fee.

Special Examination Feeper term hour, \$3.00

A student pays a fee of \$3.00 per term hour for the privilege of taking an examination for advanced credit, or other special examinations.

Graduate Qualifying Examination Fee\$1.00 to \$15.00

Paid by students taking the Graduate Record Examination or other standard tests of ability to do graduate work.

Transcript Fee\$1.00

For a transcript of his University academic record, a student pays a fee of \$1.00 for the first copy and 50 cents each for additional copies furnished at the same time. The University reserves the right to withhold transcripts for persons who have financial obligations to the institution that have not been met.

Check Irregularity Penaltyper business day, \$5.00

Penalty assessed when a check in payment for institutional charges is returned because of irregularity for which the student is responsible (NSF, illegible signature, etc.)

Late-Application Fee.....	See page 87
Placement Service Fee	See page 103
Music Course Fees	SCHOOL OF MUSIC
Library Fines and Charges.....	See page 83

Refunds

Fee Refunds. Students who withdraw from the University and who have complied with the regulations governing withdrawals are entitled to certain refunds of fees paid, depending on the time of withdrawal. The refund schedule has been established by the State Board of Higher Education, and is on file in the University Business Office. All refunds are subject to the following regulations:

(1) Any claim for refund must be made in writing before the close of the term in which the claim originated.

(2) Refunds in all cases are calculated from the date the student officially withdraws from the University, not from the date when the student ceased attending classes, except in unusual cases when formal withdrawal has been delayed through causes largely beyond the control of the student.

Deposit Refunds. The \$25.00 general deposit, less any deductions which may have been made, is refunded about six weeks after the close of the academic year. Students who discontinue their work at the University before the end of the year may receive refunds, upon petition to the Business Office, about six weeks after the close of the fall or winter terms.

Regulations Governing Nonresident Fee

Under the regulations of the Oregon State Board of Higher Education, a minor student whose parent or guardian is a bona fide resident of Oregon qualifies for enrollment under the resident fee; a student whose domicile is independent of his parent or guardian qualifies for enrollment under the resident fee if he presents convincing evidence that he established his domicile in Oregon six months prior to his first registration.

All other students are required to pay the nonresident fee, with the following exceptions: (1) a student who holds a degree from an accredited college or university (however, a nonresident student with a bachelor's degree enrolled in a curriculum at the University of Oregon Medical or Dental School leading to the degree of Doctor of Medicine or Doctor of Dental Medicine is required to pay the nonresident fee); (2) a student attending a summer session; (3) a student paying part-time fees.

A student who has been classified as a nonresident may be reclassified as a resident:

(1) In the case of a minor, if his parent or guardian has moved to Oregon and has established a bona fide residence in the state, or

(2) In the case of a student whose domicile is independent of that of his parent or guardian, if the student presents convincing evidence that he has established his domicile in Oregon and that he has resided in the state for an entire year immediately prior to the term for which reclassification is sought, and that he has no intention of moving out of the state after completion of his school work.

A student whose official record shows a domicile outside of Oregon is prima facie a nonresident and the burden is upon the student to prove that he is a resident of Oregon. If his scholastic record shows attendance at a school outside of Oregon, he may be required to furnish further proof of Oregon domicile.

If any applicant has questions concerning the rules governing the administration of these policies, he should consult the Office of Admissions.

Student Life and Welfare

Office of Student Services

DONALD M. DUSHANE, M.A.	Dean of Students
VERNON L. BARKHURST, M.A.	Director of Admissions; Associate Dean of Students
PHILIP E. BEAL, Ph.D.	Associate Dean of Students; Student Relations Officer
ROBERT L. BOWLIN, D.Ed.	Associate Dean of Students (Dean of Men)
J. SPENCER CARLSON, M.A.	Director of the Division of Research for Student Services; Associate Dean of Students
CLIFFORD L. CONSTANCE, M.A.	Registrar
EUGENE W. DILS, Ed.D.	Director of Placement Service; Associate Dean of Students
WALTER FREAUFF, M.A.	Associate Dean of Students, Armed Services, Financial Aids
KENNETH S. GHENT, Ph.D.	Associate Dean of Students; International Student Adviser
FRANCIS B. NICKERSON, D.Ed.	Associate Dean of Students; Dean of Financial Aids
*KARL W. ONTHANK, M.A.	Counselor, University Mothers and Dads
GOLDA P. WICKHAM, B.S.	Associate Dean of Students (Dean of Women)
HOWARD L. RAMEY, M.F.A.	Assistant Dean of Students; Director of Financial Aids
W. A. BROOKSBY, M.D.	Psychiatric Consultant, Counseling Center
KENNETH S. WOOD, Ph.D.	Director of Speech and Hearing Clinic
DAVID BRINKS, Ed.D.	Director of Counseling Center
ANDREW THOMPSON, Ph.D.	Counselor, Counseling Center
SAUL TOOBERT, D.Ed.	Assistant Director of Counseling Center
ANNETTE M. PORTER, Ph.D.	Counselor, Counseling Center
ELIZABETH DUBIN, Ph.D.	Counselor, Counseling Center
JIMMIE D. MERRILL, M.S.	Supervisor of Reading and Skills Laboratory, Counseling Center
ROSALIE HOWARD, M.Ed.	Counselor, Counseling Center
RICHARD O. YOUNG, Ed.S.	Counselor, Counseling Center
CHARLENE M. BLACKBURN, B.A.	Assistant Dean of Women
MARGARET BLAGO, B.A.	Associate Registrar
WILLIAM BYRON BLEVINS, M.Ed.	Assistant Dean of Students
ARTHUR L. BOWERS, B.S.	Assistant Director of the Division of Research for Student Services
MARTIN T. BROOKS, M.A.	Assistant Dean of Students; Assistant Director of Financial Aids
DOROTHY V. BROWN	Assistant Registrar
PHILIP A. CHANEY, B.S.	Assistant Dean of Students
JOHN A. CROSS, M.S.	Assistant Director of Admissions
W. MICHAEL EASTON, M.S.	Assistant Dean of Students
JOHN T. ENGLISH, M.A.	Assistant Dean of Men
FORREST J. GATHERCOAL, LL.B.	Placement Counselor
LARRY D. LARGE, B.S.	Assistant Dean of Men
THOMAS J. MILLS, B.A.	Assistant Dean of Students, International Students
MARTHA MAE NEWELL, M.P.S., B.D.	Counselor, Student Services
WALLIS CLAIR NOSLER, B.B.A.	Assistant Dean of Women
VERLIN H. ODELL, M.Ed.	Placement Counselor
CHARLES S. PALMERLEE, A.B., B.D.	Counselor, Student Services
SHELBY L. PRICE, M.Ed.	Assistant Director of Admissions
JAMES R. TOMBAUGH, M.A.	Research Assistant
LORA M. WEBB, B.S.	Assistant to International Student Adviser

AT THE UNIVERSITY OF OREGON, an integrated program of student counseling and supervision of student life and group activities is administered through the Office of Student Services. The Dean of Students is assisted by asso-

* Deceased, Oct. 27, 1967.

ciate deans with special responsibilities for: women's affairs, men's affairs, the University Counseling Center, and graduate placement. The Office of Admissions and the Registrar's Office also operate under the general direction of the Dean of Students.

The dean and his associates maintain close personal contacts with individual students and with student organizations, and are available at all times for advice and help on all matters pertaining to their welfare.

University Counseling Center. The University Counseling Center provides facilities for testing and counseling University students, to help them in making wise choices in their studies and in solving academic and personal problems. Counseling services are available without fee. A fee of \$7.50 is charged for educational and vocational testing.

Speech and Hearing Clinic. The Speech and Hearing Clinic, operating in conjunction with the Counseling Center, provides diagnosis, consultation, and treatment in connection with speech and hearing problems of University students. Students may be referred to the clinic either by the Counseling Center or by faculty advisers, or they may contact the clinic without a referral.

Reading-Study Laboratory. Some students, although they may not clearly recognize their disability, fail to get the most from their University work because of difficulties in reading. Frequently these difficulties are correctable. The Reading-Study Laboratory, operating in conjunction with the Counseling Center, provides an opportunity for scientific diagnosis and correction of student reading difficulties.

International Student Adviser. A member of the staff of the Office of Student Affairs serves as a special adviser to students from abroad who are attending the University, to assist them with personal problems and with adjustments to the customs and procedures of American educational systems. The international student adviser is prepared to give advice and help in connection with visas, government regulations, scholarships, employment, and general orientation to American life. He is also prepared to advise American students planning study abroad.

University Placement Service. The University maintains a central Placement Service for the assistance of graduating students and alumni seeking new or better positions. The Placement Service serves students in all schools and departments in the University, including those trained in business and technical fields as well as in education and the liberal arts.

Students who have taken, or are currently enrolled for, at least 12 term hours of University work, and who are completing degree requirements, are provided initial placement service without charge. Alumni, graduate students whose undergraduate work was at another institution, and former registrants who desire to use this service are charged a fee of \$5.00 per year. Registration forms may be obtained upon request.

New Student Week

NEW STUDENT WEEK, a program of orientation for entering undergraduate students, is held annually the week before classes begin. During this period, new students are made familiar with the aims of higher education, the principles governing the wise use of time and effort, methods of study, and the ideals and traditions of the institution. Every effort is made to assist new students in getting the best possible start in their work.

Partial directions concerning New Student Week and registration procedure are sent to each student who is accepted for admission. Full instructions regarding

registration are published in the Time Schedule of Classes which is distributed on campus each term. This publication is *not* mailed to entering students. Another publication designed to orient students is the Student Handbook, distributed to registering students at the beginning of each term.

Student Living

COMFORTABLE, healthful, and congenial living conditions contribute much to the success of University life and work. Living conditions of the right kind aid students to do their best in their studies and contribute, through the experiences of group life, to the building of character and personality. Hence the University is vitally concerned with student housing. Halls of residence are maintained on the campus by the institution, and the living conditions of students residing outside the dormitories are closely supervised.

Many students live in fraternity and sorority houses accommodating groups of from twenty to sixty persons. Admission to these groups is by invitation only. Students also live in private homes and rooming houses near the campus. In several cooperative houses, groups of students enjoy the benefits of group living while keeping expenses at a minimum.

University Dormitories

The University maintains six dormitories, accommodating 3,143 students, mostly in double rooms. Living conditions are comfortable and conducive to successful academic accomplishment and to participation in the wholesome activities of campus life.

Robert S. Bean Hall houses 736 students in eight units, each assigned to men or to women: Caswell, DeBusk, Ganoe, Henderson, Moore, Parsons, Thornton, and Willcox. Each unit has its own lounge and dining room.

Carson Hall, a five-story building, houses 320 students, principally in rooms accommodating two occupants. Most of the furniture is of built-in construction.

Virgil D. Earl Hall houses 327 students in five units, each assigned to men or to women: McClure, Morton, Sheldon, Stafford, and Young. Each unit has its own lounge, dining hall, and recreational area.

James W. Hamilton houses 832 students in ten units, each assigned to men or to women: Boynton, Burgess, Cloran, Collier, Dunn, McClain, Robbins, Spiller, Tingle, and Watson. Each unit has its own lounge, dining hall, and recreation area.

John Straub Hall houses 278 students in six units, each assigned to men or to women: Alpha, Gamma, Hale Kane, Barrister Inn, Omega, and Sherry Ross. Each unit has its own club room. Multiple living units accommodate two students in a study room and four sharing a sleeping porch. A limited number of single rooms are available on a priority basis.

Joshua J. Walton Hall houses 650 students in ten units, each assigned to men or to women: Adams, Clark, DeCou, Douglass, Dymont, Hawthorne, McAlister, Schafer, Smith, and Sweetser. Each unit has its own lounge, dining hall, and recreational area.

Linen (blankets, sheets, pillows, pillow cases), water glasses, ashtrays, study lamps, desks, wastebaskets, wardrobe, and laundry facilities are provided in all dormitories. Student occupants must furnish towels and irons. Ironing boards are provided in all living units, as is storage space for luggage and trunks.

University Dining Halls. The University maintains dining halls for students in Straub Hall, Earl Hall, Walton Hall, Carson Hall, Hamilton Hall, and Bean Hall. Students living in dormitories take their meals in assigned dining halls. Men and women dine together in all dining rooms.

Room Reservations. Students who plan to live in the dormitories should make room reservations as early as possible before the opening of the school year. Contracts for dormitory accommodations are for room and board for the entire school year. Application must be made on an official form, and must be accompanied by a room deposit of \$50.00, which will be applied to the first term's room and board payment.

Dormitory Living Expenses. Board and room costs in University dormitories are approximately \$365 for the fall term, \$244 for the winter term, and \$203 for the spring term—a total of approximately \$812 for the academic year.

Board and room charges are payable at the beginning of each term. If a student is unable to make the total payment at the beginning of the term, arrangement may be made for payment in two installments, the first at the beginning of the term and the second on a fixed date later in the term.

Students who do not pay board and room charges within ten days after payment is due are assessed a late-penalty fee of \$1.00 for the first day (after ten) and \$1.00 for each additional day until a maximum charge of \$5.00 is reached. If dormitory charges are not paid within ten days after they are due, the student's registration may be canceled.

Dormitory Deposit Refund. The \$50.00 room deposit will be refunded if admission to the University is not granted, or if dormitory reservations are cancelled in writing by August 1 for fall term or 14 calendar days before the term begins for winter and spring. Refunds will be made within twenty days after cancellation is received.

Fraternities and Sororities

Fraternities and sororities provide comfortable living accommodations under University supervision. Members are chosen during stated rushing periods. Board and room costs are approximately the same as for students living in University dormitories.

In the summer, after formal notice of admission has been received, new women students receive from the Office of the Dean of Women full information and instructions pertaining to sorority rush. New men students eligible to rush will receive from the Interfraternity Council complete instructions and information regarding fraternity rush. Inquiries concerning rush may be directed to the Office of the Dean of Men.

Fraternities on the Oregon campus are organized into the Interfraternity Council, which is a member of the National Interfraternity Conference. Sororities are organized into the Panhellenic Council, which is a member of the National Panhellenic Congress.

Sororities at the University are: Alpha Chi Omega, Alpha Delta Pi, Alpha Gamma Delta, Alpha Omicron Pi, Alpha Phi, Alpha Xi Delta, Chi Omega, Delta Delta Delta, Delta Gamma, Delta Zeta, Gamma Phi Beta, Kappa Alpha Theta, Kappa Kappa Gamma, Pi Beta Phi, Sigma Kappa, Zeta Tau Alpha.

Fraternities at the University are: Alpha Tau Omega, Beta Theta Pi, Chi Phi, Chi Psi, Delta Chi, Delta Tau Delta, Delta Upsilon, Kappa Sigma, Lambda Chi Alpha, Phi Delta Theta, Phi Gamma Delta, Phi Kappa Psi, Pi Kappa Alpha, Pi Kappa Phi, Sigma Alpha Epsilon, Sigma Chi, Sigma Nu, Sigma Phi Epsilon, Sigma Pi, Tau Kappa Epsilon, Theta Chi.

*

Cooperative Houses

The cooperative houses at the University of Oregon are financially independent of the University. Cooperative living functions on the principles of shared responsibility for the operation and maintenance of houses, commitment to and respect for the personal welfare of individual members, encouragement of intellectual development, provision for diverse leisurely pursuits, and emphasis on friendly fellowship with students of varying backgrounds. Cooperative housekeeping and cooking enable students to save about \$20 per month on room and board costs. Under general University housing regulations, freshman students are required to live in the residence halls unless, for financial reasons, University permission (by the Dean of Men or Dean of Women) is granted to live in cooperative houses.

There are five cooperative houses for women. Four are operated by Coed Housing, Inc.: Highland, Laurel, Rebec, and University. A fifth, Ann Judson House, is sponsored by the Baptist Church and is open for membership to women of all religions. There are three cooperatives for men: Aldersgate, Campbell Club, and Philadelphia House. Aldersgate is sponsored by the First Evangelical United Church. Requests for membership applications and for further information may be addressed to the Dean of Men or the Dean of Women.

Off-Campus Housing

Students living off campus are encouraged to select housing from a list maintained in the Housing Office in Carson Hall. Listed quarters have been inspected and certified as meeting safety and sanitation standards by the Lane County Health Department, and are rented in accordance with Oregon law prohibiting discrimination. Students requesting a copy of the inspected housing list should indicate the type of quarters they prefer.

Housing for Married Students

Housing for married students is provided in 655 furnished and unfurnished family-dwelling units owned and operated by the University. The units include a wide variety of accommodations. The rents range from \$42.50 to \$76.00 per month. Application should be made to the University Housing Office, Carson Hall.

The married-student housing program is intended primarily to accommodate married graduate students working toward advanced degrees. To be eligible for married-student housing, students must be enrolled for course work, as follows: graduate assistants, 0.5 FTE, 5 term hours; graduate assistants, 0.3 FTE, 9 hours; other graduate students, 9 hours; undergraduate students, 12 hours.

Maximum tenant occupancy is restricted to the following: 1-bedroom apartments—2 adults and 1 child under the age of one; 2-bedroom apartments—2 adults, 2 children over the age of one, and 1 child under the age of one. Occupancy is restricted to the members of one family.

Social Activities

Rules governing the social activities of the various living organizations are established by the Student Activities Committee, composed of faculty and student members. The rules are published in the Student Handbook, copies of which are available in the administrative office of Erb Memorial Union and in the office of the Dean of Students.

Housing Regulations

(1) Unmarried freshman students under the age of 21 and not living with parents are required to live in University residence halls or University-related cooperative houses (see above).

Exceptions to this rule are rare and are made only for students living with close relatives in the community or for students working for room and board. In any case, a letter of explanation from the parents is required.

(2) Other unmarried undergraduates under 21 years of age who do not live in University-related residence halls, fraternities, sororities, or cooperatives, are required to submit written parental permission to live off campus.

(3) All students living off campus are encouraged to select housing from a list maintained in the Housing Office in Carson Hall (see above).

(4) Housing in residence halls includes, in all cases, both room and board and is contracted on a yearly basis; all other campus housing (fraternity, sorority, and cooperative) is contracted on a term basis.

(5) All students enrolled in the University are subject to University housing regulations.

Student Expenses

The average expenses incurred by students at the University during an academic year are shown in the table below. Some students with ample means spend more; but many students find it possible to attend the University at a lower cost. Board and room estimates are based on charges in the residence halls. The amount of the incidental item will vary greatly with the individual. The expenses of the fall term are listed also, since there are expenses during this term not incurred during the winter and spring terms.

	Fall Term	Academic Year
Institutional fees (for Oregon residents)	\$123.00	\$ 369.00
Institutional fees (nonresident)	333.00	999.00
Deposit (refundable fall term only)	25.00	25.00
Books, supplies, etc.	75.00	150.00
Board and room	354.00	787.00
Incidentals (not including travel and clothing)	100.00	300.00
Total (Oregon residents)	\$677.00	\$1,631.00
Total (nonresidents)	\$887.00	\$2,261.00

It should be remembered that, in making an estimate of the cost of a year at the University, a student usually has in mind the amount he will spend from the time he leaves home until he returns at the close of the year. Such an estimate would include travel, clothing, and amusements—items which vary according to the thrift, discrimination, and habits of the individual. These items are not included in the table.

Student Health Service

JULIAN S. REINSCHMIDT, M.D.	Director of Health Service
*RUSSELL M. BLEMKER, M.D.	Associate University Physician
W. A. BROOKSBY, M.D.	Associate University Physician
STANLEY A. BROWN, M.D.	Associate University Physician
ROBERT J. CARSON, M.D.	Associate University Physician

* On leave of absence 1967-68.

EMILY B. FERGUS, M.D.	Associate University Physician
NORMAN A. GOSCH, M.D.	Associate University Physician
MARIAN G. HAYES, M.D.	Associate University Physician
HERBERT C. LEMON, M.D.	Associate University Physician
AVARD C. LONG, M.D.	Associate University Physician
PAUL F. WILSON, M.D.	Associate University Physician
RICHARD K. WOODWARD, M.D.	Associate University Physician

THROUGH THE STUDENT HEALTH SERVICE the University strives to safeguard the health of its students. This is accomplished through health education, medical treatment of disease, and limited psychiatric and counseling services.

The student health services in the institutions in the Oregon State System of Higher Education are supported by student registration fees and such charges as are necessary. Every student registered for credit is entitled to all the services of the Student Health Service.

The Student Health Service facility is new, designed and equipped to meet the rapidly changing concepts in medical treatment and the rapid growth of the University; it consists of out-patient departments, a 44-bed infirmary, including a modern isolation unit of four private beds, and the necessary laboratory, emergency, and administrative facilities. In general, medical services offered include: (1) general medical attention and treatment, including minor surgery (major surgery and other procedures requiring general anesthesia and specialists' services are referred); (2) 15-day free hospitalization in the Student Health Service facility during one academic year if recommended by a Health Service physician; (3) 24-hour daily emergency service; (4) routine laboratory procedures, including X-ray and clinical laboratory; (5) a pharmacy; (6) limited psychiatric and counseling services on an out-patient basis, supervised by a psychiatrist; (7) physical therapy.

Visits to the Student Health Service are by appointment, except for emergencies. An appointment can be made by telephone or by a visit to the Student Health Service. Appointments are not necessary for the Saturday morning clinic.

Charges are made against the breakage deposit for prescriptions, X-ray, laboratory procedures, and services, such as immunizations and physical therapy, but every attempt is made to keep these as low as possible.

All expenses of, or connected with, surgical operations or specialized services must be borne by the student, including the services of a special nurse, where deemed necessary. Under no circumstances will the Health Service pay or be responsible for bills from private physicians or private hospitals.

The privileges of the Health Service are not available to members of the faculty.

Physical Examination and Immunizations. For protection of the public health, the Board of Higher Education requires of all students, as a condition for admission to the University: (1) a physical examination by a licensed M.D. or D.O. chosen by the student, and presentation of a record of this examination on an official form provided by the University; (2) an intradermal tuberculin test within six months of registration; and (3) proof, to the satisfaction of the University physician, of (a) immunization against smallpox within five years and (b) diphtheria-tetanus immunization within ten years unless medically contra-indicated.

If the student is enrolled in the University at the close of a five-year period following the first physical examination, a second examination may be required; a second examination may be required after a shorter interval, at the discretion of the University physician.

Students who decline immunizations because of religious conviction may be admitted, but only on the condition that they or (in the case of minor students) their parents or guardians agree in writing to assume all expenses incident to their care or quarantine, should they acquire smallpox, diphtheria, or tetanus while

students at the University. This does not exempt them from the physical examination or the intradermal tuberculin test. However, the student may choose to have a chest X-ray in lieu of the skin test but must submit an annual chest X-ray report to remain in school.

Financial Aid

THE OFFICE of Financial Aids will assist students who need financial aid to meet the normal costs of college attendance by helping them to secure part-time employment, loans, scholarships, and grants.

Student Employment

Many students earn a large part of their expenses by work in the summers and during the academic year. The University offers assistance to those seeking part-time and vacation jobs through its Student Employment Service located in Susan Campbell Hall. No student should expect to obtain employment by correspondence. Most job opportunities are not listed until the opening of the fall term, and many commitments for employment are made only after personal interviews with prospective employers.

College Work-Study Program. Federal funds are provided to the University under the College Work-Study Program to promote part-time employment for students from low-income families and in need of earnings from such employment to continue their education.

Loans

Funds held in trust by the University and funds from Federal and state governments make possible substantial financial aid to students through loans.

University Trust Loan Funds. Funds held in trust by the University provide for regular long-term loans for periods of up to two years at a time and for emergency loans of small amounts for periods of up to ninety days. These funds are governed by uniform principles and policies as set forth below:

(1) Any student who has been enrolled in the University for at least one term and has a cumulative GPA of at least 2.00 may obtain an emergency loan for a period of three months or less; to be eligible for a long-term loan a student must have a GPA of 2.25.

(2) The service charge for emergency loans of \$10.00 or less is 50 cents for one month, 75 cents for two months, and \$1.00 for three months. The service charge for emergency loans of more than \$10.00 is \$1.00 for one month, \$1.25 for two months, and \$1.50 for three months. The service charge for all overdue emergency loans is 50 cents a month until paid in full.

(3) The interest rate for long-term loans is 4 per cent per year.

(4) No more than \$800 will be lent to any individual from University long-term loan funds.

(5) It is the policy of the University to encourage repayment of loans as soon as the borrower is able to pay. The maximum loan period is two years, with the privilege of renewal if the borrower has in every way proved himself worthy of this consideration. Payment of loans in monthly installments as soon as possible after graduation is encouraged. The interest on renewed loans is 4 per cent a year if the borrower is still a student at the University; the rate of interest on renewals made after the student leaves the University is 6 per cent.

(6) The University does not accept various forms of collateral which most money lenders require for the security of loans. The only security accepted for long-term loans is the signature of two responsible property owners, in addition to that of the student borrower. The cosigners must submit evidence of their ability to pay the note—by filing a financial statement or by giving bank references. One cosigner must qualify by bank reference. It is desirable that one of the cosigners be the parent or guardian of the borrower. If a student is married, his or her spouse must sign the loan application.

(7) The signature of the borrower is the only security required for an emergency loan. Foreign students must also obtain the signature of the international student adviser.

(8) In considering applications, the members of the Student Loan Committee give weight to the following considerations: (a) the student's scholastic record; (b) his reputation for reliability, honesty, and industry; (c) need for aid and probability of wise expenditure; (d) amount of present indebtedness; (e) ability to repay; (f) effort which the student has made to assist himself.

(9) Except in the case of a few funds which are specifically restricted to University students at Eugene, students at the Medical School, the Dental School, and the School of Nursing are eligible for loans from University student loan funds on the same basis as students on the campus at Eugene.

National Defense Student Loans. Under the National Defense Education Act of 1958, funds have been provided to the University for financial aid through National Defense Student Loans. Loans may be made from this fund to both undergraduate and graduate students who are enrolled for full-time study and who are making normal progress toward their degrees. Those who later enter the teaching profession may apply to have a portion of the amount borrowed from this fund cancelled at the rate of one-tenth of the total indebtedness for each full year of teaching up to a maximum of 50 per cent. Teaching in certain depressed areas may qualify the borrower for a greater percentage of cancellation. The amount of the loan depends on the need of the student for additional funds in order to meet normal college-related expenses but may not be more than \$1,000 a year for undergraduates or more than \$2,500 a year for graduates.

Guaranteed Student Loans. Banks and other lenders provide low-cost long-term loans to students through a system of reserve funds held by state agencies or by private nonprofit agencies like United Student Aid Funds, Inc., for the guarantee of such loans against loss by the lender. The interest rate on these loans is generally six per cent but borrowers who qualify may apply to have the interest paid by the Federal government up to six per cent a year until repayment begins, and up to three per cent a year during the period of repayment.

Further information about financial assistance through loans, and application forms for loans, may be obtained from the Office of Financial Aids, Emerald Hall.

Scholarships

Financial assistance through scholarships is provided through state funds and agencies, through University gifts and endowments, and through private donors. Such aid recognizes academic ability and promise and is usually awarded only to those who, in addition, show need for financial help in order to meet normal college costs.

Application for state scholarships and for all scholarships which are administered by the University is made on the form furnished by the Oregon State Scholarship Commission. Entering freshmen obtain and file applications through their high school. Enrolled students obtain and file applications through the Office of Financial Aids of the University. Applications must be filed before March 1 for the following academic year. A single application indicating proposed attendance at the University assures consideration for every scholarship for which the student may be eligible. Some awards listed below require special application as indicated.

State Scholarships

State Partial Tuition and Fee Scholarships for Oregon Residents. By state law, the Oregon State Scholarship Commission annually awards partial tuition and fee scholarships equal in number to $2\frac{1}{2}$ per cent of the enrollment in the institutions of the State System of Higher Education. Approximately one-half of these scholarships are awarded to entering freshmen, who are eligible to apply if they are in the upper half of their high-school class. The remainder of the awards

go to enrolled students who are eligible for consideration if their cumulative and previous-term GPA is 2.50 or better. These awards are made for one year at a time and pay a portion of the total registration fees only; the recipient must pay the remainder of the fees from his own funds.

State District and County Scholarships. The Oregon State Scholarship Commission awards annually one four-year scholarship for each Oregon county and for each state legislative seat. The value of these is the same as that of State Partial Tuition and Fee Scholarships. Entering freshmen make application for these awards on special forms supplied by the scholarship commission through Oregon high-school principals.

State Cash Scholarships. A limited number of four-year cash scholarships, with a maximum value of \$500 per year, are awarded annually by the Oregon State Scholarship Commission to especially able graduates of Oregon high schools who are in need of financial assistance. The scholarships may be used at any accredited institution of higher education in the state of Oregon. Entering freshmen obtain application forms from the office of their high-school principal and the completed forms are transmitted by the high school to the office of the scholarship commission.

State Fee Scholarships for Nonresident Students. State law authorizes the Oregon State Scholarship Commission to award a limited number of scholarships annually to residents of the United States who are not residents of Oregon, for study in the institutions of the State System of Higher Education. At the University, these scholarships vary in amount from a portion of to the entire nonresident fee.

State Fee Scholarships for Foreign Students. A limited number of scholarships are awarded annually to students from foreign countries attending institutions of the State System of Higher Education. These awards are in variable amounts related to the fees charged by the institution and the need for funds by the student. Application is made to the Office of Foreign Student Adviser, University of Oregon, Emerald Hall.

University Scholarships

Income from dedicated endowment funds, gifts to special funds and to the Development Fund make possible the award of approximately 200 scholarships annually. As noted above, the completion of a single application gives a student consideration for any of these awards for which he is eligible.

Private Scholarships

Each year several hundred students attend the University with financial help through awards made to them by companies, foundations, trusteeships, lodges and clubs, and private individuals. Funds for many of these awards are sent to the University Business Office where they are held in trust for the student to help him meet his college expenses as they occur during the year.

Most of these awards are made to entering freshmen and application must be made directly to the donor. Students interested in these scholarships should consult their high-school principals and senior counselors who have details and applications.

Grants

The program of Educational Opportunity Grants established by the Higher Education Act of 1965 provides for cash awards of up to \$800 per academic year

to students with exceptional financial need who require such assistance to attend college. An Opportunity Grant may not be more than half the financial assistance being received by the student and thus may require application for and acceptance of other assistance. The amount of the grant will depend upon the personal financial position of the student and his family and upon the need for additional funds to meet the costs of attending college as well as upon the total costs of attending the University of Oregon. Eligible students who are accepted for enrollment and who are offered financial assistance which includes an Educational Opportunity Grant can expect to have such assistance continued for up to four years of undergraduate study provided they maintain good academic standing, make normal and expected progress toward a degree, and complete any required applications or reports. Adjustments in the amount of total assistance may be necessary from year to year as a result of changes in costs or changes in funds available to the student.

Erb Memorial Union

RICHARD C. REYNOLDS, M.Ed.	.....Director
CHRIS F. KARP, B.S.	.....Associate Director
MARY A. HUDZIKIEWICZ	.....Assistant Director for Activities
ADELL McMILLAN, M.S.	.....Assistant Director for Programs
EUDALDO REYES, M.A.	.....Assistant Director for Activities

THE ERB MEMORIAL UNION is a building dedicated to making the extra-curricular work of students an integral part of their education. It provides group meeting rooms, a lounge, soda bar, cafeteria, and dining room, an art gallery, a large ballroom, and a Browsing Room, a branch of the University Library. Student activity offices are on the third floor. For recreation there is a "listening room" for classical music, a room for jazz, a piano practice room, a "combo" practice room, a sixteen-lane bowling alley, billiard tables, and table tennis and shuffleboard facilities. Also housed in the building are the offices of the Y.M.C.A., a branch of the U.S. Post Office, and a six-chair barber shop.

The Union was built solely through gifts from alumni and friends of the University, student building fees, and the sale of bonds to be retired from future building fees. The building is named in memory of Dr. Donald M. Erb, President of the University from 1938 until his death in 1943.

Graduate School

LEONA E. TYLER, Ph.D., Dean of the Graduate School.

ALBERT R. KITZHABER, Ph.D., Associate Dean of the Graduate School.

ROBERT M. MAZO, Ph.D., Associate Dean of the Graduate School.

W. DWAIN RICHINS, Ph.D., Associate Dean of Graduate Students.

CALVIN W. FISK, B.S., Administrative Officer.

FRED J. MOHR, B.A., Special Assistant to the Dean.

Graduate Council

LEONA E. TYLER (chairman), VERNON L. BARKHURST, FORREST L. BRISSEY, PAUL CIVIN, CLIFFORD L. CONSTANCE, VERNON R. DORJAHN, PHILIP GRANT, STANLEY B. GREENFIELD, CARL W. HINTZ, GEORGE M. HODGE, ALBERT R. KITZHABER, ROY H. RODGERS, LESTER G. SELIGMAN, JAMES W. SHERBURNE, LLOYD R. SORENSON, BERTRAM YOOD.

THE PRIMARY AIM of undergraduate education is to prepare the student for cultured living and intelligent citizenship, and to acquaint him with techniques leading to a professional career. In graduate study the dominant aim is the development of the scholar, capable of original thinking and of creative achievement in the advancement and extension of knowledge. Hence, a graduate degree indicates more than the mere completion of a prescribed amount of advanced study; it indicates that the student has shown both promise and performance in some field of independent scholarship.

At the University of Oregon, all study beyond the bachelor's degree, except strictly professional work in law, medicine, and dentistry, is administered through the Graduate School. The formulation of the graduate programs of individual students and the working out and direction of these programs are the responsibilities of the instructional department, subject, however, to the general rules and requirements of the Graduate School.

Research. Through its Office of Scientific and Scholarly Research and with advice and assistance from the faculty Research Committee, the Graduate School administers the University's program for the encouragement and approval of research by members of its faculty and the University's interdisciplinary research institutes (see pages 124-129).

Advanced Degrees

THE UNIVERSITY OF OREGON offers through the Graduate School work leading to advanced degrees in the liberal arts and sciences, and in the professional fields of architecture and allied arts, business administration, dental sciences (at the Dental School in Portland), education, health, physical education, and recreation, journalism, medical sciences (at the Medical School in Portland), music, and nursing (at the School of Nursing in Portland). The degrees granted, and the fields in which programs of study leading to the respective degrees are currently offered, are listed below:

Doctor of Philosophy: anthropology, art history, biology, chemistry, comparative literature, economics, education, English, geography, geology, Germanic languages, health, physical education, and recreation, history, mathematics, medi-

cal sciences, philosophy, physics, political science, psychology, Romance languages, sociology, speech.

Doctor of Business Administration: business administration.

Doctor of Education: education, health, and physical education, and recreation.

Doctor of Musical Arts: Music.

*Master of Arts: anthropology, art, art history, biology, business administration, chemistry, Classical languages, comparative literature, economics, education, English, geography, geology, Germanic languages, health, physical education, and recreation, history, journalism, mathematics, medical sciences, music, philosophy, physics, political science, psychology, Romance languages, sociology, speech.

*Master of Science: art, biology, business administration, chemistry, dental sciences, economics, education, geography, geology, health, physical education, and recreation, journalism, mathematics, medical sciences, nursing, physics, political science, psychology, sociology, speech.

Master of Architecture: architecture.

Master of Fine Arts: drawing and painting, sculpture, ceramics, weaving, jewelry and metalsmithing, creative writing, theater.

Master of Business Administration: marketing, insurance, and transportation, finance and business environment, accounting and business statistics, personnel and industrial management.

Master of Education: education.

Master of Landscape Architecture: landscape architecture.

Master of Library Science: librarianship.

Master of Music: music education, performance and music literature, composition.

Master of Urban Planning: urban planning.

General Regulations

THE UNIVERSITY recognizes two classes of graduate students: (1) students enrolled in the Graduate School for work toward a graduate degree, and (2) unclassified graduate students. Students of the first class follow programs organized in conformity with the rules stated below. Students of the second class enroll for courses in which they are interested, with the understanding that the University is under no implied obligation to accept credit earned as credit toward a graduate degree. Whether a student is adequately prepared to enroll in any graduate course is determined by the instructor in charge and by the head of the department or school concerned.

Admission. For admission as a graduate student for work toward a graduate degree the student must meet minimum University requirements and be accepted by the department or school in which he wishes to work. The general University requirements for graduate admission, summarized below, may be supplemented by special requirements of departments and schools. Former University students (graduates and undergraduates) must be formally admitted to graduate status. A student who wishes to change his major must be formally admitted to the school or department in which he intends to work for a degree.

* See also "Interdisciplinary Master's Programs," page 118.

An applicant should address inquiries concerning graduate admission to the department or school in which he plans to study, not to the Graduate School or the Office of Admissions.

Documents Supporting Application. An applicant for admission as a graduate student must submit: (1) two copies of an application on an official University form, and (2) two copies of an official transcript of his college record. One copy of these credentials should be sent to the department or school in which the applicant plans to study and the other to the Office of Admissions.

Minimum Requirements for Admission. Minimum University requirements for graduate admission are as follows:

Admission for Work Toward a Graduate Degree. Graduation from an accredited college or university with a cumulative undergraduate grade-point average of 2.75 or higher is required for admission for work toward a graduate degree. A student who has completed 12 or more term hours of graduate work at another institution with a GPA of 3.00 or higher is admitted without reference to his undergraduate GPA if the work is accepted by his major department or school as applicable toward a graduate degree. A student whose academic record does not meet these standards may be granted admission on a provisional basis for not more than 36 term hours of graduate work.

Admission as an Unclassified Student. Students having a baccalaureate degree and wishing to attend classes, but who do not wish to conform to a degree program or have not been accepted by a department, may be admitted to the Graduate School as unclassified students. Students in this category are advised through a separate procedure and must have permission from the instructor to enroll in any graduate course. If a department later decides to accept an unclassified student in a degree program, he is treated as though he were a transfer from another school. This may include acceptance, at the department's discretion, of up to 12 graduate credit hours earned as an unclassified student toward a graduate degree.

Continuous Enrollment. A graduate student who has been admitted for work toward a graduate degree is required to enroll in the University each term during the regular academic year from the time of first enrollment until the completion of all degree requirements, including the submission of thesis or dissertation, the passing of all examinations, and the awarding of the degree. His enrollment is either as a student in residence or as a student on leave of absence.

Leave of absence is granted for a stated period of time, normally not to exceed one calendar year. A graduate student on leave of absence is expected neither to make use of University facilities nor to place demands upon the faculty, and therefore pays no fees during the leave period.

Failure to maintain continuous enrollment, either in residence or on leave of absence, is considered evidence that the student has withdrawn from the University. If he wishes to resume his studies, he must formally apply for readmission, and must satisfy requirements for admission in effect at the time of application.

Reservation of Graduate Credit. The Graduate School encourages superior students to begin their graduate studies as early in their careers as feasible. A student at the University of Oregon who needs not more than 48 term hours in order to complete requirements for a bachelor's degree (i.e., who has senior standing) and who has a cumulative GPA of 3.00 or higher may petition the dean of the Graduate School for the reservation of credit in specified graduate courses. A "Reservation of Credit" form, available in the office of the Graduate School, must be filed not later than two weeks after the beginning of the term in which the courses involved are taken. Credit may not be reserved for courses taken during a period of more than three terms. A student who has been granted reservation of credit is assigned a graduate adviser to assist him in planning his graduate work.

Course Registration Requirements. The maximum course load for a graduate student devoting all of his time to graduate study in a regular term or in an eleven-week summer session is 16 term hours; the minimum is 12 hours. The maximum for a teaching or research assistant is 12 term hours. The maximum course load for an eight-week summer session is 13 term hours. Credit for work taken in excess of these maximums cannot be applied toward a degree.

All graduate students using campus facilities (including taking examinations for an advanced degree) or studying under the supervision of a member of the faculty are required to register for a minimum of 3 term hours of course work.

All graduate students holding half-time teaching or research appointments are required to register for a minimum of 6 term hours of course work; students holding three-tenths-time appointments are required to register for a minimum of 9 term hours of course work.

Students working for a master's degree with thesis are required to register for a minimum of 9 term hours in Thesis (503) before completing the program for the degree. Students working for a doctor's degree are required to register for a minimum of 18 term hours in Thesis before completing the program for the degree.

Grade Requirement. A graduate student is required to earn at least a B grade average to qualify for a graduate degree. A grade-point average of less than 3.00 at any time during the student's graduate studies is considered unsatisfactory, and may result in disqualification by the dean of the Graduate School after consultation with the student's major department or school. Disqualification means reduction to postbaccalaureate standing. A course in which the student earns a grade of D will not carry graduate credit, but will be included in the computation of the student's GPA. F grades will also be included in the GPA computation.

In all divisions except the School of Law, Research (501) and Thesis (503) are classified as no-grade courses, and are disregarded in the calculation of the student's GPA.

Graduate Courses. All courses numbered in the 500s carry graduate credit, as do those in the 400s which have been approved by the Graduate Council. Approved courses in the 400s are designated in this Catalog by (G) or (g) following the course title. Courses designated (G) may form a part of either a major or a minor; courses designated (g) may be taken only toward a minor or as graduate service courses. Graduate students taking courses in the 400s are expected to do work of a higher order and broader scope than the work of undergraduate students in the same courses. Undergraduate enrollment in the 400 courses designated (G) is generally restricted to seniors; undergraduate enrollment in 400 courses designated (g) is generally restricted to juniors and seniors.

Courses numbered in the 500s and designated (p) represent instruction offered at a level of intellectual maturity suitable for graduate students who have earned a bachelor's degree in a field other than their professional field. Such courses carry credit toward a master's degree, but this credit may not be counted toward the minimum requirement of 30 term hours in the major.

Off-Campus Graduate Courses. Graduate students at the University of Oregon may, with the consent of their advisers, take courses carrying graduate credit at Oregon State University and at the Oregon College of Education. Students register for these courses on the Eugene campus. Grades are transmitted by the instructor to the University Registrar and recorded on the student's University of Oregon transcript.

Fees and Deposits. Regular fees and tuition for students in the Graduate School, for both residents of Oregon and nonresidents, total \$143.00 per term. Students holding graduate or research assistantships or fellowships which involve teaching or research duties pay a special reduced fee of \$35.00 per term. For 7

term hours of work or less, students pay the regular part-time fee ranging from a minimum of \$31.00 for 2 term hours to a maximum of \$108.50 for 7 term hours. Payment of full-time or part-time fees entitles a graduate student to all services maintained by the University for the benefit of students.

Graduate students must make a \$25.00 general deposit once each year at the time of first registration, as a protection to the University against the loss of or damage to institutional property.

A new graduate student, who has not been previously enrolled in the University of Oregon, pays a \$10.00 application fee; this fee, which is not refundable, must be sent to the Office of Admissions with the student's application for admission. A student who is applying for a teaching or research assistantship may defer formal application for admission and payment of the application fee until negotiations for the assistantship are completed.

A new graduate student, who has not been formerly enrolled in the University of Oregon, and who plans to enroll in the fall term, must also make a \$25.00 entrance deposit on receipt of his notice of admission to the University; when he enrolls and completes registration, this deposit becomes his \$25.00 general deposit (see above). If the student does not complete his registration, the entrance deposit is forfeited.

A special fee of \$20.00 is paid by all students who are granted doctor's degrees, to cover the cost of reproduction of their theses on microfilm or microcards.

Degree Requirements

Master of Arts, Master of Science

Credit Requirements. For a master's degree, the student must complete an integrated program of study totaling not less than 45 term hours in courses approved for graduate credit. Integration may be achieved either through a departmental major or through a program of interdisciplinary studies (see page 118). For the master's degree with a departmental major, a minimum of two-thirds of the work (30 term hours) must be in the major.

Residence Requirement. The residence requirement for the master's degree is 30 term hours of work on the Eugene campus or at the Medical School, Dental School, or School of Nursing in Portland.*

Transferred Credit. Credit earned at other accredited institutions, or in the Division of Continuing Education of the Oregon State System of Higher Education, may be counted toward the master's degree under the following conditions: (1) the total of transferred credit may not exceed 15 term hours; (2) the courses must be relevant to the degree program as a whole; (3) the transfer must be approved by the student's major department and the Graduate School; (4) the grades earned must be A or B. Graduate credit is not allowed for correspondence courses. Credit granted for work done at another institution is tentative until validated by work in residence (see also "Time Limit" below).

Language Requirements. For the M.A. degree, the student must show, by examination or by adequate undergraduate courses (completion of the second-year college course), a reading knowledge of French, German, or Russian, or any other language the Graduate Council may have approved for the student's department or

* M.B.A. and M.Ed. programs, which are now being phased out, permit the use of credit from the Portland Continuation Center to count as residence work. Candidates for the M.S. degree with a major in health, physical education, and recreation may apply, toward the satisfaction of the residence requirement, a maximum of 18 term hours earned in courses in the Portland summer session taught by members of the University faculty.

school. With the approval of his school or major department, a student may petition the dean of the Graduate School for permission to substitute another language. A foreign student whose native tongue is not English, and who was admitted before fall 1967, may, on the recommendation of his school or department, substitute a reading and speaking knowledge of English for the satisfaction of the language requirement. Foreign students admitted in fall 1967 and thereafter may not do so. There are no language requirements for the M.S. and professional degrees unless specified by the school or department.

Course Requirements. For the M.A. or M.S. degree with a departmental major, at least 9 term hours in 500-599 courses are required.

Time Limit. All work toward the master's degree (including work for which credit is transferred from another institution, thesis, and the final examination) must be completed within a period of seven years.

Examinations. Qualifying and final examinations may be required in any field at the discretion of the department or school: The conduct and content of these examinations are departmental or school responsibilities.

Thesis. In some fields, all candidates for the master's degree are required to present a thesis; in others the thesis is optional or not required.

A student who writes a thesis should apply to his school or department for information on the various steps involved and the minimal standards expected. The student should also call at the Graduate School to learn the University rules regarding thesis style and format, number of copies required, abstracts, etc. Copies of theses will not be accepted by the Graduate School unless they meet specified standards of form and style.

Interdisciplinary Master's Programs

In addition to specialized graduate work in the traditional fields of learning, the University provides opportunities for integrated interdisciplinary studies leading to the M.A. or M.S. degree—including both programs planned in the light of the individual student's interests and established programs of interdisciplinary studies organized and administered through interdepartmental faculty committees.

Graduate students pursuing a program of interdisciplinary studies may supplement courses offered by the several departments and schools with individualized studies, for which they may enroll under the following course numbers:

ISt 501. **Research.** Hours to be arranged.

ISt 503. **Thesis.** Hours to be arranged.

The established interdisciplinary programs approved by the Graduate Council are listed below. A student interested in one of these programs should direct his inquiry to the chairman, whose name is also listed: International Studies, Dr. Clarence E. Thurber; Asian Studies, Dr. Theodore Stern; Juvenile Correction, Dr. Kenneth Polk; Public Affairs, Dr. Jarold Kieffer; Industrial and Labor Relations, Dr. Paul Kleinsorge.

The requirements for an M.A. or M.S. degree in interdisciplinary studies are the same as those for the departmental master's degree, except those requirements relating to major or minor fields.

The program is supervised by the Committee on Interdisciplinary Studies, of which Dr. Lloyd R. Sorenson, professor of history, is chairman.

Graduate Program for Teachers. A special program of graduate study for students working toward the satisfaction of the Oregon state requirement of a

fifth year of college work for final high-school teacher certification is offered as one of the University's programs of interdisciplinary studies. The student must have a reasonable background of undergraduate study in education and in the field in which he proposes to work, and must complete prerequisites for specific courses. The requirements for a master's degree in the program for teachers are as follows:

(1) A total of between 45 and 51 term hours in graduate courses, distributed in accordance with (a) and (b) below:

(a) A total of 36 term hours in subject fields (work in liberal arts departments or professional schools other than education), distributed in accordance with one of the following options:

Option 1. Between 15 and 21 term hours in each of two subject fields.

Option 2. A minimum of 36 term hours in one of the following fields: English, foreign language, geography, history, and mathematics.

Option 3. A minimum of 36 term hours in the composite field of social studies or the composite field of science. A program in social studies must include work in at least three of the following fields: anthropology, economics, geography, history, political science, psychology, and sociology. A program in science must include work in at least three of the following fields: biology, chemistry, geology, mathematics, and physics.

In each of the options listed above, at least 6 term hours of work must be taken in 500 courses. The student's program must be planned to provide well-rounded knowledge, and must not be made up of scattered, unrelated courses.

For Options 1 or 2, 18 term hours in each of the subject fields involved must be presented as an undergraduate prerequisite. For Option 3, the prerequisite is 12 term hours in each of the specific fields involved.

(b) Between 9 and 15 term hours in graduate courses in the field of education, the number of hours to be determined on the basis of the amount of work in education completed by the student as an undergraduate.

(2) Satisfaction of the regular requirements of the Graduate School for the M.A. or M.S. degree without thesis. The combined total of work transferred from other accredited institutions and work done in the Division of Continuing Education of the Oregon State System of Higher Education cannot exceed 15 term hours.

Inquiries about the interdisciplinary programs for teachers in history, English, mathematics, geography, and foreign languages should be directed to the chairmen of these academic departments. Inquiries about programs in other areas should be directed to Dr. Lloyd R. Sorenson.

Master of Business Administration

The requirements for the degree of Master of Business Administration are listed under COLLEGE OF BUSINESS ADMINISTRATION.

Master of Education

The Master of Education is a professional degree in the field of education. Programs of study leading to this degree are designed to provide graduate training for teachers in either the elementary or the secondary schools. At the discretion of the faculty of the School of Education, the candidate may be required to submit a report of a field study. A written comprehensive final examination in the student's field of specialization is required.

The residence requirement for the M.Ed. degree is 30 term hours of graduate work on the University campus.

Master of Fine Arts

The degree of Master of Fine Arts is granted for attainments and proven creative ability in the arts. The primary requirement is the satisfactory completion of a creative project of high quality. All candidates must, however, satisfy minimum requirements of residence and study.

Early in his M.F.A. program, the student takes a qualifying examination as prescribed by the major school or department. This examination may cover any work done at another institution which is to be part of the candidate's M.F.A. program.

The student plans his M.F.A. program with the assistance of a major adviser and such faculty members as may be designated by his school or department. The program must include at least 18 hours in formal graduate courses dealing with the history and theory of his genre or with the critical investigation of its standard or classic works; this work may include related studies outside the student's major field; with the approval of the student's advisory committee, this requirement may be satisfied by comprehensive examinations.

For the M.F.A. degree, at least two years of full-time work beyond the bachelor's degree are required, of which at least one year must be spent in residence on the Eugene campus of the University of Oregon.

Every candidate for the M.F.A. degree must submit an extended creative work or project of high professional character. It is expected that the preparation of an acceptable project will require the greater part of an academic year. Three clear copies of the project or of a report on the project as prescribed by the candidate's major school or department and approved by the adviser, must be distributed by the student to the members of his examining committee not less than four weeks before the time set for his final examination. At the conclusion of the examination, the copies of the project, if a verbal composition, with the required revisions, if any, are deposited in the office of the Graduate School. (Copies of reports on nonverbal productions—painting, sculpture—need not be deposited with the Graduate School.)

Except in the case of the M.F.A. degree in writing, the final examination for the M.F.A. degree must include an oral examination, open to all members of the faculty and to advanced graduate students. The date of the oral examination is publicly announced at least one week before it is held. The examining committee consists of the candidate's advisory committee and other members, including at least one not directly connected with the major department or school. The committee is nominated by the major department or school, subject to the approval of the dean of the Graduate School. Oral examinations for the M.F.A. degree in writing are given only in special cases when the Creative Writing Committee of the Department of English recommends them.

Master of Architecture

The requirements for the degree of Master of Architecture are listed under SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

Master of Landscape Architecture

The requirements for the degree of Master of Landscape Architecture are listed under SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

Master of Library Science

The requirements for the degree of Master of Library Science are listed under SCHOOL OF LIBRARIANSHIP.

Master of Music

The requirements for the degree of Master of Music are listed under SCHOOL OF MUSIC.

Master of Urban Planning

The requirements for the degree of Master of Urban Planning are listed under SCHOOL OF ARCHITECTURE AND ALLIED ARTS.

Doctor of Philosophy

General Requirements. The degree of Doctor of Philosophy is granted primarily for attainments and proven ability. Requirements of time and credit are secondary; but no candidate will be recommended for the degree until he has satisfied the minimum requirements of residence and study.

It is recommended that a student not take all his undergraduate and all his Ph.D. work at the University of Oregon.

Qualifying Examination. Early in his doctoral program, the student takes a qualifying examination as prescribed by the major school or department. This examination may cover any work done at another institution for which transfer credit is requested. An exceptionally good performance on the final examinations for the master's degree may be accepted as satisfying the qualifying-examination requirement.

Doctoral Program. The student plans his doctoral program with the assistance of his major adviser. As soon as he has passed his qualifying examination, his program is presented for approval to an advisory committee, appointed by the dean of the Graduate School. The committee determines the amount of work the student is expected to do outside his major school or department, in light of his background and objectives.

Residence. For the Ph.D. degree, at least three years of full-time work beyond the bachelor's degree are required, of which at least one academic year (three consecutive terms) must be spent in continuous residence on the Eugene campus of the University of Oregon or at the University of Oregon Medical School in Portland.

Language Requirement. For the Ph.D., the student must demonstrate by formal examinations a reading knowledge of a first and second language. Normally, these languages are selected from French, German, and Russian. Additional second languages for certain schools and departments have been approved by the Graduate Council. A foreign student whose native language is not English and who was admitted before fall 1967 may petition to substitute a reading and speaking knowledge of English for one of the two required languages. Students may petition the Graduate School for approval of other languages. The Graduate Council has approved a limited number of substitutes for the second language in certain schools and departments.

Comprehensive Examinations. The student working toward the Ph.D. degree must pass a group of comprehensive examinations (oral or written or both) not less than one academic year before he expects to complete work for the degree. These examinations are expected to cover all areas of concentration and may cover any supporting area if this seems desirable to the advisory committee. Advancement to candidacy is contingent on passing these examinations. The student is not eligible to take the examinations until he has satisfied the language requirement and has taken substantially all the course work for the degree.

The final examination for a doctor's degree must be taken not later than three calendar years after advancement to candidacy. Failure to complete requirements for the degree within this period will result in invalidation of the student's comprehensive examinations.

Thesis. Every candidate for the Ph.D. degree must submit a thesis embodying the results of research, and showing evidence of originality and ability in inde-

pendent investigation. The thesis must be a real contribution to knowledge, based on the candidate's own investigations. It must show a mastery of the literature of the subject, and be written in creditable literary form. It is expected that the preparation of an acceptable thesis will require at least the greater part of an academic year.

Three clear copies of the thesis, including the original copy, approved and signed by the adviser, must be distributed by the student, unbound, to the members of his examining committee not less than four weeks before the time set for his final examination; at the conclusion of the examination, these copies, with required revisions, if any, are deposited in the Graduate Office. Copies of the thesis will not be accepted by the Graduate Office unless they meet satisfactory standards of form and style. Seven copies of an abstract of the approved thesis (not longer than 600 words) must be filed in the office of the Graduate School four weeks before the examination.

Final Examination. The final examination for the Ph.D. degree may be written in part, but must include an oral examination of at least two hours' duration. The oral examination is open to all members of the faculty and to advanced graduate students. The date of the oral examination is publicly announced at least one week before it is held. The examining committee consists of the candidate's advisory committee and other members, including at least one not directly connected with the major department or school. The committee is nominated by the major department or school, subject to the approval of the dean of the Graduate School.

In the oral examination, the candidate is expected to defend his thesis and to show a satisfactory knowledge of his major field. The written examination, if given, is expected to cover aspects of the major field with which the thesis is not directly concerned.

Doctor of Business Administration

The requirements for the degree of Doctor of Business Administration are listed under COLLEGE OF BUSINESS ADMINISTRATION.

Doctor of Education

General Requirements. The degree of Doctor of Education is granted in recognition of mastery of theory, practice, and research in professional education or in health and physical education. In addition to a primary area of specialization, the student's plan of study should include work in supporting areas of education, foundation areas, a research area, and some noneducation courses related to his program. There is no specific foreign language requirement for the D.Ed. degree; however, a student whose fields of training or whose research project calls for a reading knowledge of one or more foreign languages may be required to demonstrate the needed linguistic ability. With the exceptions indicated in this section, the general requirements with respect to the qualifying examination, residence, comprehensive examinations, thesis, and final examinations for the D.Ed. degree are the same as those listed above for the Ph.D. degree.

Thesis. The doctoral dissertation may be either a report of research which makes an original contribution to knowledge or a study in which the student deals with knowledge already available and produces a constructive result of importance and value for educational practice. The dissertation proposal should be developed early in the doctoral program.

Advancement to Candidacy. Advancement to candidacy for the D.Ed. degree in the School of Education is based on proficiency shown in comprehensive examinations and the recommendation of a doctoral advisory committee. The

comprehensive examinations may be taken only after the student has (1) been admitted to the degree program, (2) completed approximately two-thirds of the total course work in his program, (3) obtained approval of his dissertation proposal by his advisory committee, and (4) received the consent of his adviser to take the examinations. Students interested in the D.Ed. degree in the School of Health, Physical Education, and Recreation must meet requirements established by that school.

Doctor of Musical Arts

The requirements for the degree of Doctor of Musical Arts are listed under *SCHOOL OF MUSIC*.

Assistantships, Scholarships, Fellowships

TEACHING AND RESEARCH assistantships, scholarships, and fellowships are available to well-qualified graduate students. Applications should be made before March 1.

All persons holding these positions must enroll in the Graduate School, and are expected to enter a program leading to an advanced degree.

Teaching Assistantships. Nearly all schools and departments award graduate teaching assistantships. Stipends range from \$1,800 to \$2,800 for an academic year. Teaching assistants are allowed to register for a maximum of 12 term hours of course work. Duties, which are limited to 15 hours a week, consist of reading papers, supervising laboratory and quiz sections, etc.

Research Assistantships. A number of departments and schools employ graduate research assistants, who work under the supervision of faculty members. Funds come from research grants and contracts. Stipends, fees, and enrollment limitations are the same as for teaching assistants; augmented service in the summer may substantially increase the annual stipend.

Special Fellowship Programs. Graduate students at the University of Oregon are eligible for fellowship awards granted by the National Science Foundation, the National Institutes of Health, the Woodrow Wilson Foundation, and other endowed foundations. The University participates in the National Defense Education Act Program, Experienced Teacher Fellowship Program, Prospective Teacher Fellowship Program, NSF Traineeship Program and the NSF Summer Traineeship Program for Teaching Assistants. Information concerning these programs may be obtained in the Graduate Office.

Postdoctoral Fellowships. The University of Oregon participates in several postdoctoral fellowship programs and provides facilities for postdoctoral study under faculty supervision.

Loans. Graduate students are eligible for loans from University loan funds (see pages 109-110) and from funds available under the National Defense Education Act of 1958. The University also participates in United Student Aid Fund, Inc.

Graduate Work in Portland

GRADUATE WORK leading to degrees from the University is offered in Portland at the University of Oregon Medical School, the University of Oregon Dental School, and the University of Oregon School of Nursing, and through the Division of Continuing Education of the Oregon State System of Higher Education.

Medical School. The Medical School offers graduate instruction leading to the M.S. and Ph.D. degrees in the medical sciences (anatomy, bacteriology, biochemistry, medical psychology, pathology, pharmacology, and physiology). Graduate degrees earned at the Medical School are conferred by the University, on the recommendation of the faculty of the Medical School.

Dental School. The Dental School offers graduate work leading to the M.S. degree for students planning careers in dental education and research. Graduate major programs are offered in the fields of anatomy, bacteriology, biochemistry, dental materials, oral pathology, orthodontics, pedodontics, pharmacology, and physiology. Graduate degrees earned at the Dental School are conferred by the University, on the recommendation of the faculty of the Dental School.

School of Nursing. The School of Nursing offers graduate work leading to the M.S. degree to prepare qualified professional nurses for teaching positions in nursing. Graduate degrees earned in the School of Nursing are conferred by the University, on the recommendation of the faculty of the School of Nursing.

Research Institutes

SEVERAL INTERDISCIPLINARY INSTITUTES administered through the Graduate School provide opportunities for graduate training and research in addition to those offered by the schools and departments. Institute staff members hold joint appointments in related teaching departments. Graduate students who intend to do thesis research work in one of the institutes must satisfy the graduate degree requirements of the related department through which they will receive their degree.

Students who wish to work in any of the institute fields may obtain detailed information concerning the programs and available financial aid from the institute directors.

Institute of Molecular Biology

AARON NOVICK, Ph.D., Director of Institute of Molecular Biology; Professor of Biology.

SIDNEY A. BERNHARD, Ph.D., Professor of Chemistry.

JOHN R. MENNINGER, Ph.D., Assistant Professor of Biology.

WILLIAM T. SIMPSON, Ph.D., Professor of Chemistry.

FRANKLIN W. STAHL, Ph.D., Professor of Biology.

GEORGE STREISINGER, Ph.D., Professor of Biology.

PETER H. VON HIPPEL, Ph.D., Professor of Chemistry.

ASSOCIATES

EDWARD HERBERT, Ph.D., Associate Professor of Chemistry.

JOHN A. SCHELLMAN, Ph.D., Professor of Chemistry.

WILLIAM R. SISTROM, Ph.D., Associate Professor of Biology.

RAYMOND G. WOLFE, Ph.D., Professor of Chemistry.

The Institute of Molecular Biology is a center for research and research instruction in areas of biology where understanding is found in terms of the properties of macromolecules, particularly nucleic acids and proteins. Staff members hold joint appointments in a department (biology, chemistry, or physics).

Current research projects in the institute are concerned with such topics as genetic recombination and mutation in bacteria and bacterial viruses, the genetic control of protein synthesis, the regulation of the rate of protein formation, molecular structural aspects of biological specificity, biocatalysis, and biological coding.

The institute sponsors seminars, special lectures, visiting professorships, and instruction in research, but does not conduct a formal teaching program. Members of the institute staff offer courses in their fields of competence through the departments with which they are affiliated.

Research instruction is offered at both the graduate and postdoctoral levels. With the approval of the department concerned, graduate students in biology, chemistry, or physics may do research in the institute as a part of their programs leading to graduate degrees. Research advisers may be members either of the institute staff or of a departmental faculty.

Institute of Theoretical Science

MARVIN D. GIRARDEAU JR., Ph.D., Director of Institute of Theoretical Science; Professor of Physics.

RICHARD B. BARRAR, Ph.D., Associate Professor of Mathematics.

ROBERT S. FREEMAN, Ph.D., Associate Professor of Mathematics.

GERALD D. MAHAN, Ph.D., Assistant Professor of Physics.

ROBERT M. MAZO, Ph.D., Professor of Chemistry.

MICHAEL J. MORAVCSIK, Ph.D., Professor of Physics.

MICHAEL R. PHILPOTT, Ph.D., Assistant Professor of Chemistry.

WILLIAM T. SIMPSON, Ph.D., Professor of Chemistry.

ROBERT L. ZIMMERMAN, Ph.D., Assistant Professor of Physics.

ASSOCIATES

JOEL W. MCCLURE, Ph.D., Professor of Physics.

JOHN L. POWELL, Ph.D., Professor of Physics.

GREGORY H. WANNIER, Ph.D., Professor of Physics.

The Institute of Theoretical Science provides a center for interdisciplinary research in overlapping areas of theoretical physics, theoretical chemistry, and mathematics.

Current research is centered in the areas of statistical mechanics, chemical physics, theory of solids and liquids, nuclear theory, elementary particle theory, and applied and applicable mathematics.

Graduate students with adequate preparation in one of the science departments may elect thesis research in the institute. The institute also sponsors postdoctoral research associateships and visiting professorships.

Statistical Laboratory and Computing Center

FRED C. ANDREWS, Ph.D., Director of Statistical Laboratory and Computing Center; Professor of Mathematics.

GEORGE W. STRUBLE, Ph.D., Associate Director; Associate Professor of Mathematics.

ROBERT F. TATE, Ph.D., Research Associate; Professor of Mathematics.

HENRY LEON LOEB, Ph.D., Research Associate; Associate Professor of Mathematics.

DAVID G. MOURSUND, Ph.D., Research Associate; Associate Professor of Mathematics.

DONALD R. TRUAX, Ph.D., Research Associate; Associate Professor of Mathematics.

THEODORE K. MATTHES, Ph.D., Research Associate; Associate Professor of Mathematics.

CHANDRAKANT M. DEO, Ph.D., Research Associate; Assistant Professor of Mathematics.

GERALD ATHERTON KING, B.A., Research Associate; Acting Assistant Professor of Sociology.

RICHARD W. HALLER, Ph.D., Research Associate; Assistant Professor of Psychology.

GORDON P. ASHBY, M.B.A., Computer Systems Programming Supervisor; Instructor in Mathematics.

ROBERT L. HEILMAN, M.A., Computer Systems Development Programmer; Instructor in Mathematics.

NORBERT E. DEY, B.S., Computer Systems Maintenance Programmer.

The Statistical Laboratory and Computing Center conducts research in statistics, numerical analysis, and computer science, and provides a consulting service in statistical methodology and computational procedures. Facilities maintained in the Computing Center include two computers: an IBM 360 Model 50H, and an IBM 1620, and peripheral data-processing equipment. The staff and facilities of the Computing Center provide assistance to research projects and instructional programs of the various colleges, schools, departments, and institutes of the University. The Computing Center also provides consultation in use of the facilities, an applied programming service, a documents room, a card punching service and tutorials on elementary and advanced topics relevant to the use of computers.

Institute of International Studies and Overseas Administration

JOHN F. GANGE, M.A., Director of Institute of International Studies and Overseas Administration; Professor of Political Science.

MARK R. GREENE, Ph.D., Research Associate, Institute of International Studies and Overseas Administration; Director, Center for International Business; Professor, College of Business Administration.

CLARENCE E. THURBER, Ph.D., Deputy Director of Institute of International Studies and Overseas Administration; Professor of International and Public Affairs.

The Institute of International Studies and Overseas Administration is responsible for the development and coordination of University activities in the field of international affairs. Its primary functions are: (1) to develop programs of research, teaching, and administration, in cooperation with private and governmental agencies, and to arrange for the conduct of these programs by University personnel, both on the campus and overseas; (2) to assist the Committee on International Studies and Overseas Administration in the administration of graduate study in international affairs and to provide research training for graduate students; and (3) to serve as the University's center for other faculty and student activities concerned with international affairs.

The institute supervises a graduate study program leading to the Master of Arts in international studies (a two-year degree program) and cooperates with

major departments in supervising Ph.D. programs for students who elect an emphasis on international affairs within their chosen disciplines.

The institute sponsors and encourages faculty research in international affairs and assists in providing opportunities for joint faculty and student research projects on campus and overseas. Research assistantships are available in the institute; research and research training bases have been established in many foreign countries.

The institute also conducts graduate seminars to provide opportunities for students and members of the faculty to share ideas and experiences with visiting lecturers, special consultants, and among themselves. In addition to its campus programs, the institute arranges for advanced students opportunities for overseas study and for administrative experience on foreign projects.

The institute supports the University's annual Summer World Affairs Program and the program of the Oregon High School International Relations League.

Institute for Community Studies

ROLAND J. PELLEGRIN, Ph.D., Director of Institute for Community Studies and the Center for the Advanced Study of Educational Administration; Professor of Sociology.

MAX G. ABBOTT, Ph.D., Deputy Director, Center for the Advanced Study of Educational Administration; Professor of Education.

THEODORE R. ANDERSON, Ph.D., Director, Center for Ecological Studies; Professor of Sociology.

The Institute for Community Studies conducts and encourages research in the behavioral and social sciences, education, and related areas. Most projects carried on under the auspices of the institute have a community orientation, focusing on the structure and functioning of the community as a social and political system. Emphasis is on the policy-formulation processes in the economy, government, education, and other institutional areas of the community.

The institute provides facilities for individual research by members of the faculty and for cooperative projects, together with opportunities for continuing communication, criticism, and reports of progress by participating scholars. It also provides research training for graduate students in connection with institute projects, with emphasis on the development of specific research designs as a basis for graduate dissertations.

The Center for the Advanced Study of Educational Administration, a division of the institute, was established in 1964 with funds granted by the Research and Development Center Program of the United States Office of Education. The program of the center is concerned with the internal organization and functioning of public educational institutions and educational systems and with the relationships of these institutions and systems to the larger environments in which they are located.

Under contract with the United States Office of Education and in conjunction with the program of the Center for the Advanced Study of Educational Administration, the Institute has operated a unit of the Educational Resources Information Center since 1966. This unit, the ERIC Clearinghouse on Educational Administration, receives, processes, stores, and analyzes documents in the field of Educational Administration and distributes them to nationwide audiences.

The Center for Ecological Studies was established in 1967 in order to conduct research on ecological and demographic factors in social organization.

As divisions of the institute, centers draw upon the services of staff members and graduate students in the behavioral sciences and in the field of education.

Bureau of Business and Economic Research

DONALD A. WATSON, Ph.D., Director, Bureau of Business and Economic Research; Associate Director, Institute of Industrial and Labor Relations; Professor of Business Economics.

JEROME J. DASSO, Ph.D., Associate Director, Bureau of Business and Economic Research; Associate Professor of Real Estate.

PAUL L. KLEINSORGE, Ph.D., Associate Director, Bureau of Business and Economic Research; Director of Institute of Industrial and Labor Relations; Professor of Economics.

JEANNETTE F. LUND, M.A., Research Assistant.

EDWARD M. SIENKIEWICZ, B.A., Research Assistant.

The Bureau of Business and Economic Research conducts and encourages research in business, economics, and related fields. Studies undertaken by the bureau or for which it provides assistance in research design and facilities are financed through University funds and through grants from foundations, government agencies, and the business community.

The bureau publishes the monthly *Oregon Business Review*, the *Oregon Economic Statistics*, and monographs reporting the results of business and economic research.

The bureau works in close cooperation with the Institute of Industrial and Labor Relations.

Institute of Industrial and Labor Relations

PAUL L. KLEINSORGE, Ph.D., Director of Institute of Industrial and Labor Relations; Associate Director of Bureau of Business and Economic Research; Professor of Economics.

DONALD A. WATSON, Ph.D., Director, Bureau of Business and Economic Research; Professor of Business Economics.

EATON H. CONANT, Ph.D., Associate Director; Associate Professor of Management.

STEVEN E. DEUTSCH, Ph.D., Assistant Director; Assistant Professor of Sociology.

The Institute of Industrial and Labor Relations conducts a program of research, public service, and graduate study in the field of industrial relations; see COLLEGE OF LIBERAL ARTS for information on graduate study. The institute's research program includes studies in manpower resources, labor mobility, wage structures, personnel problems, management and labor organizations, communications in labor relations, labor legislation, and collective bargaining. The approach is interdisciplinary, involving the cooperative efforts of scholars in the several social sciences and related professional schools. In its research program, the institute is closely associated with the Bureau of Business and Economic Research. Research assistantships are available for graduate students.

The institute also sponsors programs in labor education and management, including regular campus courses, evening classes through the Division of Continuing Education, special seminars, and conferences, and provides an information service on problems of industrial relations.

Institute for College Teaching

WILLIAM C. JONES, Ph.D., Director of the Institute for College Teaching; Dean of Administration; Professor of Higher Education.

The programs of the Institute for College Teaching include: (1) the conduct of research on various problems relating to college teaching, the improve-

ment of the quality of college teaching, the preparation of college teachers, and related professional problems of direct concern to college teachers; (2) the organization, supervision, and coordination of systematic programs of carefully supervised teaching experiences for students preparing for college teaching careers; (3) the preparation and presentation of courses and seminars dealing with the nature, structure, history, philosophy, and organization of institutions of higher learning.

The institute, with the cooperation of members of the faculties of the several schools and departments, offers a seminar concerned with the broad problems of higher education and college teaching:

***ISt 507. Higher Education Seminar. 1 hour.**

Jones, staff.

* No-grade course.

Honors College

CHARLES E. JOHNSON, Ph.D., Dean of the College of Liberal Arts.

FRANCIS E. DART, Ph.D., Director of the Honors College; Assistant Dean of the College of Liberal Arts.

LAWRENCE W. ROSS, JR., J.D., Associate Director of the Honors College.

THE HONORS COLLEGE offers a four-year undergraduate program leading to the degree of Bachelor of Arts (Honors College). The College program is designed to provide full opportunity for the superior student to develop his highest potential in liberal education and specialized training; it is open to students majoring in liberal arts or in professional schools.

Honors College Center. An Honors College Center has been established in Friendly Hall. The center includes small study rooms, a colloquium meeting room, a small library, the office of the Honors College, and a common room where students may meet and talk informally.

Admission

Application for admission to the Honors College is invited from students in the top tenth of their high-school classes, who have had four years of work in English, three years in social science, and two years each in mathematics, science, and foreign language. Students of exceptional ability who lack some of these qualifications, but who believe they are capable of honors work at the University, are also invited to apply.

Freshman applicants must submit scores on College Entrance Examination Board tests, including aptitude tests and achievement tests in English, mathematics, and a foreign language. With the approval of the director of the Honors College, the examination in foreign language may be waived in special cases, e.g., if the student's high school does not offer adequate work in the field.

Students applying for admission to the Honors College must also make separate application for admission to the University. Both University and Honors College application forms may be secured from the Office of Admissions.

Admission of transfer students and students already enrolled in the University is based on the student's college records.

Curriculum and Requirements

The degree of Bachelor of Arts (Honors College) is conferred on students who satisfy the following requirements:

(1) Proficiency in a foreign language equivalent to that reached in the second-year college course.

(2) A satisfactory record on comprehensive examinations in each of six core areas. It is recommended that the student take these examinations during his first three years. The courses which prepare for the comprehensive examinations are:

(a) History—History (Honors College) (Hst 107, 108, 109).

(b) Literature—Literature (Honors College) (AL 101, 102, 103).

(c) Social Science—Introduction to the Social Sciences (SSc 201, 202, 203);* or Principles of Economics, honors section (Ec 201, 202, 203).

* SSc 201, 202, 203 satisfies prerequisite requirements for upper-division courses in anthropology, geography, political science, psychology, and sociology.

- (d) Science—Physical Science (Honors College) (GS 204, 205, 206) ; *or* Biological Science (Honors College) (Bi 104, 105, 106) ; *or* General Chemistry, honors section (Ch 204, 205, 206) ; *or* General Physics, honors section (Ph 201, 202, 203) ; *or* General Geology (Geol 101, 102, 103).
- (e) Philosophy—Introduction to Philosophy (Honors College) (Phl 207, 208, 209).
- (f) Mathematics—Fundamentals of Mathematics (Honors College) (Mth 107, 108, 109) ; *or* Analytic Geometry and Calculus, honors section (Mth 204, 205, 206).

Students may prepare for the comprehensive examinations in the core areas by taking the designated courses or through independent study. A student who prepares without formal course work, and passes the comprehensive examination, may receive credit in the corresponding course. A student who receives full college credit, through the Advanced Placement Program, for a course included in the Honors College core program satisfies the requirement in that field and is excused from the comprehensive examination. With the consent of his adviser, a liberal arts major may omit one of the six core areas and a professional-school major may omit two.

(3) Honors work in English composition—one term of Expository Writing (Wr 226), two terms of Composition Tutorial (Wr 231, 232).

(4) Two terms in Colloquium (HC 404) in the junior or senior year. Colloquia provide seminar-type instruction for students of varying backgrounds, each colloquium focusing for one term on a common topic outside the students' major fields. All colloquia are graded on a "pass-no pass" basis.

(5) Completion of an honors program in the student's major; see MAJOR REQUIREMENTS, below.

(6) Satisfactory performance in a final comprehensive oral examination covering the student's major and related work.

Honors College students must also satisfy general University requirements for the B.A. degree (other than the group requirement). The "pass-no pass" grading option is acceptable in the Honors College wherever it is not in conflict with departmental major requirements.

In addition to the courses listed above, the Honors College curriculum includes honors work in English composition, honors sections in several other fields (including basic design, foreign languages, literature, United States history, speech, accounting, statistics, and health education), and opportunities for work in departmental honors seminars, research projects, and reading and conference.

The Honors College student takes approximately one-half of his work in honors classes and the remainder in regular University courses.

Major Requirements

The major programs planned by departments and schools for students in the Honors College provide for independent study and generally allow greater flexibility in the satisfaction of course requirements than the regular undergraduate programs of the divisions. The special requirements of the several divisions for majors enrolled in the Honors College are listed below.

General Arts and Letters. At least 9 term hours in seminar, reading and conference, thesis, or research (or a combination), leading to the preparation of senior honors thesis.

General Science. A minimum of 30 graded upper-division hours in science, including 9 hours at the 400 level in one science which are acceptable for a depart-

mental major or 9 hours at the 300 level which are required for a departmental major. No senior comprehensive examination or thesis is required.

General Social Science. (1) Of the four upper-division year sequences required of all majors, at least one at the 400 level; (2) at least 9 term hours in seminar, reading and conference, thesis, or research (or a combination), leading to the preparation of senior honors thesis.

Anthropology. Senior honors thesis, requiring one or more terms for completion, for a maximum of 6 term hours.

Architecture and Allied Arts. Colloquium, honors reading and conference.

Asian Studies. Senior honors thesis utilizing materials in a foreign language germane to the region with which the thesis is concerned. (The final oral examination will cover the thesis.)

Biology. Honors thesis based on original observations or experiments, for which credit may be obtained under Bi 401. A maximum of 8 hours of credit for research and a maximum of 4 hours of credit for thesis is allowed. (Honors students may be admitted to graduate courses in the department.)

Business Administration. Major programs developed in consultation with the Undergraduate School of Business honors adviser.

Chemistry. (1) Ch 204, 205, 206, Ch 207, 208, 209 for satisfaction of freshman chemistry requirement; (2) Mth 204, 205, 206; (3) in senior year, research and honors thesis.

Classics, and Chinese and Japanese. (1) Normally, in the junior year, seminar in the literature of the student's principal language; (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee.

Economics. (1) Honors sections of Ec 201, 202, 203 and SSc 201, 202, 203; (2) at the option of the student and the instructor, 1 term hour each term in reading and conference related to the work of each upper-division economics course for which the student is enrolled; (3) Mth 204, 205, 206 unless specifically exempted by student's advisor; (4) either Mth 423, 426, 427 or Mth 441, 442, 443; (5) Ec 375, 376, 377 before senior year; (6) two 9-hour sequences in economics at the 400 level; (7) honors seminar in the fall and winter terms of the senior year; (8) senior honors essay. (Seniors completing their honors essay enroll for three credit hours in Ec 401 in the spring term.)

Education. (1) Honors section of Ed 405; (2) reading and conference, 3 term hours, culminating in an essay.

English. 9 term hours of independent study in a literary period, type, etc., approved by the department honors committee, culminating in winter term of senior year in a scholarly or critical honors essay.

Geography. (1) Geog 481, 482, 483; (2) Geog 421, 422, 423; (3) Geog 491, 492, 493; (4) junior and senior honors seminars; (5) at student's option, senior honors thesis. Recommended: Geol 101, 102, 103.

Geology. (1) Year sequence in calculus or statistics; (2) Geol 311, 312, 313, Geol 406, Geol 411; (3) additional year sequence in geology, mathematics, or other science; (4) senior honors thesis based on original research, for 3 term hours of credit.

German and Russian. (1) Normally, in the junior year, seminar in the literature of the student's principal language; (2) in the senior year, honors thesis,

essays, or other evidence of serious and coherent work approved by the department honors committee.

History. Complete requirements for a major in history, including (1) junior honors seminar, 9 term hours; (2) senior honors essay, 7 term hours; (3) oral examination over two of the following fields: (a) Greece and Rome, (b) mediaeval Europe, (c) Renaissance and Reformation, (d) Europe 1500-1789, (e) Europe since 1789, (f) United States, (g) Far East, (h) Latin America.

Journalism. (1) J 485, J 487; (2) senior thesis (J 403), 6 term hours; (3) examination before faculty committee on thesis and professional course work.

Law. (1) Independent reading of four to six books about the law—history, biography, jurisprudence, fiction, etc.—selected with the approval of the faculty; (2) completion of law school work counted toward the B.A. degree with a GPA of 2.25 or higher.

Mathematics. (1) Mth 204, 205, 206 (preferably honors section); (2) Mth 415, 416, 417, Mth 431, 432, 433; (3) an oral examination, ordinarily in the senior year, covering advanced topics assigned by the student's adviser.

Medicine. (1) Three years of work in the Honors College; (2) completion of the first-year professional program in medicine with a scholastic rank in the upper half of his class.

Music. (1) 9 term hours of independent study of a musical period, style, genre, composer, etc.; (2) honors essay in spring term of senior year.

Philosophy. (1) Senior honors essay, following intensive study of some aspect of philosophy either in connection with a senior seminar or, when recommended, on a tutorial basis, with 9 term hours of credit; (2) a comprehensive written examination.

Physics. Maximum of 18 term hours of credit in independent study (research, reading and conference, thesis).

Political Science. (1) Spring term of junior year, honors seminar, 3 term hours; (2) fall term of senior year, reading and conference, 3 term hours; (3) winter and spring terms of senior year, honors essay, 6 term hours of thesis credit. This is in addition to the minimum 36 term hours required for a major in political science.

Psychology. (1) Honors seminar; (2) honors thesis. (It is strongly recommended that honors students take Mth 425, 426 or Mth 441, 442, 443 in the junior year; advanced laboratory courses required of all majors).

Romance Languages. (1) Normally, in the junior year, a year's sequence of Honors College seminars in the literature of the student's principal language; (2) in the senior year, honors thesis, essays, or other evidence of serious and coherent work approved by the department honors committee.

Sociology. (1) Soc 311, Soc 334, Soc 342, Soc 470 (students planning to do graduate work are urged to substitute Soc 411, Soc 412, Soc 413 for Soc 311); (2) minimum of 12 term hours in a substantive area of sociology; (3) honors thesis involving sociological analysis (maximum credit, 9 term hours). The thesis examination includes examination of the candidate's knowledge of the relevant related literature.

Speech. (1) Honors seminar during junior year; (2) honors readings, fall term of senior year; (3) honors thesis, prepared during winter and spring terms of senior year.

Advanced Placement Program

Students who complete college-level work in high school under the Advanced Placement Program sponsored by the College Entrance Examination Board and who receive satisfactory grades in examinations administered by the Board may, on admission to the University, be granted credit toward a bachelor's degree in comparable University courses.

The fields included in the Advanced Placement Program are: English composition and literature, American history, European history, biology, chemistry, physics, mathematics, French, German, Spanish, and Latin.

College of Liberal Arts

CHARLES E. JOHNSON, Ph.D., Dean of the College of Liberal Arts.

GLENN STARLIN, Ph.D., Associate Dean.

WILLIAM J. HANDY, Ph.D., Associate Dean.

*A. KINGSLEY WEATHERHEAD, Ph.D., Associate Dean.

FRANCIS E. DART, Ph.D., Director of the Honors College; Assistant Dean.

LAWRENCE W. ROSS, JR., Ph.D., Associate Director of the Honors College.

LEWIS E. WARD, JR., Ph.D., Director of Academic Advising; Assistant Dean.

THE COLLEGE OF LIBERAL ARTS gives form to man's study of his world, his history, and himself. Programs centered in the three great disciplines of the natural sciences, the social sciences, and the humanities emancipate his mind and extend that knowledge which is indispensable to the good life of free men.

The instructional divisions of the college are: Anthropology, Biology, Chemistry, Classics, and Chinese and Japanese, Economics, English, Geography, Geology, German and Russian, History, Home Economics, Mathematics, Philosophy, Physics, Political Science, Psychology, Religious Studies, Romance Languages, Sociology, and Speech. All the divisions, except the departments of Home Economics and Religious Studies, offer major curricula leading to baccalaureate and graduate degrees.

Also administered through the college are special programs in Asian studies, comparative literature, general arts and letters, general science, general social science, industrial and labor relations, and Latin American studies; preparatory programs in dentistry, medical technology, medicine, nursing, and pharmacy; and the Museum of Natural History.

Entrance Requirements. There are no entrance requirements, beyond the general entrance requirements of the University, for students intending to choose a major within the College of Liberal Arts.

Students intending to major in any of the natural sciences are, however, advised to present at least two units of high-school mathematics and two units of high-school science. Experience has proved that students who lack this preparation are handicapped in University work in science. Students planning to major in chemistry, mathematics, or physics or planning to prepare themselves for entrance to a medical school will find it to their advantage to take intermediate algebra, plane geometry, and trigonometry in high school.

Degree Requirements. For a bachelor's degree with a major in the College of Liberal Arts, a minimum of 186 term hours of University work is required, including:

(1) A minimum of four sequences in liberal arts courses numbered from 100 to 120 or 200 to 220, in satisfaction of the general University lower-division group requirement (for a complete statement of the regulations governing this requirement, and a list of group courses, see pages 92-94).

(2) In addition, two sequences in liberal arts courses numbered from 100 to 120, 200 to 220, or 300 to 310.† Of the total of six sequences elected for the satis-

* On sabbatical leave 1967-1968.

† Requirement (2) does not apply to students who are admitted to the University of Oregon Medical School or Dental School from other accredited institutions and who are candidates for a baccalaureate degree from the University of Oregon.

faction of requirements (1) and (2), two must be chosen from each of the three groups: arts and letters, social science, and science; the two sequences in social science and in science must be from different departments. (For a list of group courses see pages 92-94).

(3) A minimum of 62 term hours in upper-division courses.

(4) A minimum of 36 term hours in the student's major field, at least 24 of which must be in upper-division courses. Some departments require more than the 36-hour minimum. For certain interdepartmental majors the major requirement is approximately 72 term hours of work distributed in several departments.

Honors College. Through the Honors College, the University offers a four-year program of liberal education for selected superior students, leading to the degree of Bachelor of Arts (Honors College). The Honors College also supervises the University's participation in the Advanced Placement Program sponsored by the College Entrance Examination Board. See page 134.

Interdepartmental Courses

Arts and Letters*

LOWER-DIVISION COURSES

AL 101, 102, 103. **Literature (Honors College).** 3 hours each term.

Intensive study of selected works of Occidental literature. Combellack, G. Johnson, Moll, Nicholls, Powers, Wegelin.

UPPER-DIVISION COURSES

AL 301, 302, 303. **Introduction to Japanese Literature.** 3 hours each term.

Fall: origins through Fujiwara (twelfth century A.D.), with emphasis on the *Tale of Genji*; winter: mediaeval (Kamakura, Muromachi, Tokugawa) literature including drama (*nō*, *kabuki*, *bunraku*), *haiku*, and *ukiyo* writing; spring: literature since the Meiji Restoration (1868). All readings in English. Naff.

AL 304, 305, 306. **Literature of the Ancient World.** 3 hours each term.

Fall: Homer to Aeschylus; winter: Sophocles to Plutarch; spring: Latin literature from Plautus to Apuleius. Lectures and readings in English. Special attention to influence of Greek and Latin writers on English literature. Combellack, Pascal.

AL 307, 308, 309. **Introduction to Chinese Literature.** 3 hours each term.

Ancient Chinese literature and Confucian classics, with emphasis on poetry; later prose, poetry, and literary criticism; the development of drama and fiction. Readings and lectures in English. Sun.

AL 310, 311, 312. **Introduction to Germanic Literature.** 3 hours each term.

In English. Lectures and assigned readings covering the whole range of German literature.

AL 321, 322, 323. **Classic Myths.** 1 hour each term.

The three major myths of the classical world: Troy, Thebes, and the Golden Fleece. Lectures and readings in English. Black, Pascal.

AL 331, 332, 333. **Introduction to Russian Literature.** 3 hours each term.

Russian literature from origins to 1917, with special emphasis on Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. Readings in English; Russian majors do selected readings in the original. Leong.

AL 340, 341, 342. **Russian Culture and Civilization.** 3 hours each term.

Main currents of Russian intellectual, literary, and artistic life. Leong.

* For major program in general arts and letters, see page 175.

AL 351, 352, 353. **Scandinavian Literature in Translation.** 3 hours each term.

Outstanding works of Scandinavian literature, studied in translation. Fall: Norwegian; winter: Swedish; spring: Danish. Prerequisite: upper-division standing. Williams.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AL 405. **Reading and Conference.** (g) Hours to be arranged.

AL 407. **Seminar.** (g) Hours to be arranged.

AL 421. **Modern Russian Short Story.** (g) 3 hours.

Development of Russian short story. All readings in English; Russian majors do selected readings in the original. Rice.

AL 422. **Modern Russian Poetry.** (g) 3 hours.

Detailed study of Russian symbolism, acmeism, and futurism. All readings in English; Russian majors do selected readings in the original. Leong.

AL 423. **Modern Russian Drama.** (g) 3 hours.

Evolution of Russian drama. All readings in English; Russian majors do selected readings in the original. Leong, Rice.

AL 424. **Dostoevsky.** (g) 3 hours.

Dostoevsky's intellectual and artistic development. *The Double, Notes from the Underground, Crime and Punishment, The Idiot, The Devils, The Brothers Karamazov*, and other works. Readings in English; Russian majors do selected readings in the original. Leong.

AL 425. **Tolstoy.** (g) 3 hours.

Development and context of Tolstoy's art; analysis of *War and Peace, Anna Karenina*; representative short novels, stories, plays, and essays. Readings in English; Russian majors do selected readings in the original. Leong.

AL 450, 451. **Descriptive Linguistics.** (g) 3 hours each term.

Study of the general internal structure of languages. Prerequisite: senior or graduate standing, three years of college language study; or consent of instructor. Miyaji.

AL 477, 478, 479. **Dante and His Times.** (g) 3 hours each term.

Historical and literary background of the *Divine Comedy*; study of the poem and of Dante's minor works; Petrarch and Boccaccio. Lectures and readings in English. Beall.

GRADUATE COURSES

AL 503. **Thesis.** Hours to be arranged.

AL 507. **Seminar.** Hours to be arranged.

AL 514, 515, 516. **Introduction to Comparative Literature.** 3 hours each term.

Study of significant examples of literature illustrating influences, themes, and movements that cross linguistic frontiers; opportunity for individual research on problems involving two or more literatures.

AL 586, 587. **Comparative Literary Criticism.** 3 hours each term.

Designed to familiarize the student with the more important approaches to the criticism of literature current in the twentieth century; practical experimentation with methods and texts; readings, discussion, and analysis of literary works. Forms a year sequence with Eng 585.

General Science*

LOWER-DIVISION COURSES

GS 104, 105, 106. **Physical-Science Survey.** 4 hours each term.

General introduction to the physical sciences; principles of astronomy, physics,

* For major program in general science, see pages 175-176.

and chemistry, geologic processes, and man's relation to them. Special emphasis on scientific method. 4 lectures. Powell, Ellickson.

GS 204, 205, 206. Physical Science (Honors College). 4 hours each term.

Introduction to certain basic concepts, terms, and methods of modern physical science, with emphasis on the interrelations of the physical sciences with each other and with other fields of knowledge. Dart.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

GS 411, 412, 413. History of Science. (g) 2 hours each term.

Lectures, readings, and discussions of selected topics in the history of science, considered as a part of the cultural history of Western civilization in the period 1500-1900.

General Social Science*

LOWER-DIVISION COURSES

SSc 104, 105, 106. Social Science and Social Policy. 3 hours each term.

SSc 201, 202, 203. Introduction to the Social Sciences (Honors College). 3 hours each term.

A study of some fundamental concepts in the social sciences. Satisfies prerequisite requirement for upper-division courses in anthropology, geography, political science, psychology, and sociology. Allman, Dumond, MacGregor, Urquhart.

Anthropology

Professors: V. R. DORJAHN (department head), H. G. BARNETT, L. S. CRESSMAN (emeritus), A. G. SMITH, THEODORE STERN.

Associate Professors: D. E. DUMOND, P. E. SIMONDS.

Assistant Professors: K. A. BENNETT, D. L. COLE, LEROY JOHNSON, J. G. JORGENSEN, MALCOLM McFEE, ANN G. SIMONDS, M. J. STANISLAWSKI, D. T. WALLACE, P. D. YOUNG.

Assistants: G. A. BAILEY, S. F. BEDWELL, G. H. BLAIR, J. P. BOGGS, I. A. BRADY, S. D. BUSSEY, G. H. CLARK, C. A. FERNANDEZ, E. L. FROST, JANET O. FROST, E. A. GEHR, D. R. GORDON, ROBERTA L. HALL, D. L. HARDESTY, C. A. HEIDENREICH, L. T. HUBBARD, R. R. HUSTED, R. L. A. MACE, F. E. MILLER, E. G. SCHWIMMER, R. D. SINGH, J. D. STEWART, R. TONKINSON, ETHEL TRYGG, P. M. WEIL, L. H. WILLIAMS, J. A. WOODWARD.

THE COURSES offered by the Department of Anthropology are planned to provide a broad and deep understanding of human nature and society for students in other fields, as well as integrated programs for majors in anthropology.

A high-school student planning to major in anthropology is advised to take two years of high-school mathematics, preferably algebra. He should also come to the University with a sound background in English, so that he can read with understanding and express himself with clarity.

Majors in anthropology are required to take the following lower-division courses: General Anthropology (Anth 101, 102, 103) or Introduction to Cultural Anthropology (Anth 207, 208, 209); a year sequence in psychology.

At the upper-division level the following courses are required for majors: Peoples of the World (Anth 314, 315, 316); Physical Anthropology (Anth 320, 321, 322); World Prehistory (Anth 411, 412, 413); and one area course at the

* For major program in general social science, see page 176.

400 (G) level. Students planning to do graduate work should take two years of German and two years of a second foreign language, preferably French or Spanish. To insure a broad liberal education, it is strongly recommended that the student limit his undergraduate work in anthropology to a maximum of 51 term hours.

The department offers graduate work leading to the Master of Arts and Doctor of Philosophy degrees. Graduate instruction includes work in the fields of archaeology, ethnology, linguistics, and physical anthropology. To qualify for a master's degree, students must demonstrate a basic competence in all these fields.

The carefully selected anthropological collections of the Museum of Natural History provide excellent material for class instruction, particularly in the culture of the American Indian.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in anthropology must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in anthropology required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the anthropology faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

LOWER-DIVISION COURSES

Anth 101, 102, 103. **General Anthropology.** 3 hours each term.

Fall: man as a living organism; biological evolution; fossil man; winter: prehistoric cultures; spring: organization and functioning of culture. 2 lectures, 1 discussion period. Simonds, Stanislawski.

Anth 207, 208, 209. **Introduction to Cultural Anthropology.** 3 hours each term.

The meaning of culture; its significance for human beings; its diverse forms and degrees of elaboration among different groups of men; its processes of growth and expansion. 2 lectures; 1 discussion period. McFee.

UPPER-DIVISION COURSES

Anth 301, 302, 303. **Society and Culture.** 3 hours each term.

An introductory course in cultural anthropology for upper division students not majoring in anthropology. Peoples from different parts of the world are examined in detail, with emphasis on comparative social organization. Not open to majors or to students who have taken Anth 207, 208, 209, Anth 314, 315, 316, or a comparable course in cultural anthropology. Prerequisite: upper-division standing. Stanislawski.

Anth 314, 315, 316. **Peoples of the World.** 3 hours each term.

Historical treatment of world culture areas, exclusive of Europe. Regional variations in culture, their backgrounds, and their significance in contemporary world affairs. Materials drawn from Africa, Asia, Oceania, and the Americas. Prerequisite: upper-division standing. Young.

Anth 320, 321, 322. **Physical Anthropology.** 3 hours each term.

Processes and theory of evolution as applied to man and his relatives. Fall: comparative osteology of humans and other primates; fossil record of early primates; winter: man's place among the primates; fossil man; principles

in human evolution; spring: variability in fossil and modern man; morphological and genetic criteria of variability; factors in population change; blood groups. Prerequisite: upper-division standing or consent of instructor. Simonds, Bennett.

Anth 323. Laboratory in Physical Anthropology. 2 hours.

Optional laboratory work for students enrolled in Anth 320, 321, 322. Observation and measurement of skeletons; anthropometry; comparative primate anatomy. Simonds, Bennett.

Anth 401. Research. Hours to be arranged.

Anth 403. Thesis. Hours to be arranged.

Anth 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Anth 407. Seminar. (g) Hours to be arranged.

Anth 408. Field Work in Anthropology. (G) Hours to be arranged.

Anth 411, 412, 413. World Prehistory. (g) 3 hours each term.

Survey of the main developments in world prehistory. Fall: methods of archaeology; geological and biological background of paleolithic man; the Old World paleolithic; winter: Old World village and urban development; spring: New World hunting and gathering; agricultural-village life, urban society. Prerequisite: upper-division standing. Stanislawski.

Anth 414. Race and Culture. (G) 2 hours.

Racial classifications and comparisons; the biological base of culture; attitudes toward race in human relations. Prerequisite: 9 hours in anthropology or consent of instructor. Jorgensen, Simonds.

Anth 415. Socialization in Primitive Society. (G) 2 hours.

Methods of child rearing, education, and social control among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

Anth 416. History of Anthropology. (G) 2 hours.

A nontheoretical exposition of the beginnings and specialized developments within the fields of archaeology, physical anthropology, ethnology, and linguistics. Prerequisite: 9 hours in anthropology or consent of instructor. Barnett, Stern.

Anth 417, 418, 419. The American Indian. (G) 3 hours each term.

Indian life in Central, South, and North America before white contact; contemporary Indian life where groups still survive. Prerequisite: 9 hours in anthropology or consent of instructor. Jorgensen, Stern, Young.

Anth 423, 424, 425. Peoples of the Pacific. (G) 3 hours each term.

Life and customs among the native groups of the South Pacific, including Polynesia, Micronesia, Melanesia, Australia, and Indonesia. Prerequisite: 9 hours in anthropology or consent of instructor. Smith.

Anth 426, 427, 428. Peoples of Africa. (G) 3 hours each term.

The cultures of Negro Africa; their history and development; the problems of contemporary Africa. Fall: South and East Africa; winter: Central and West Africa; spring: the problems of modern Africa. Prerequisite: 9 hours in anthropology or consent of instructor. Dorjahn.

Anth 434, 435, 436. Peoples of the Near East. (G) 3 hours each term.

The ethnic groups of North Africa and Southwestern Asia; Islam and Islamic social structure as a unifying force; the relations of the Near East with Negro Africa and Asia. Prerequisite: 9 hours in anthropology or consent of instructor.

Anth 437. Peoples of Interior Asia. (G) 3 hours.

Cultures of Interior Asia: paleo-Siberians, Mongols, Manchus, Kirghiz,

Kazaks, and other peoples of Asiatic Russia. Prerequisite: 9 hours in anthropology or consent of instructor.

Anth 438, 439, 440. Peoples of Southern and Eastern Asia. (G) 3 hours each term.

Introduction to the cultures of India and Pakistan, China, and Southeast Asia; development of distinctive culture configurations; interrelationships of culture; impact of westernization; ethnic and linguistic factors. Fall: South Asia; winter: the Chinese culture sphere; spring: Southeast Asia. Prerequisite: 9 hours in anthropology or consent of instructor. Stern.

Anth 441, 442, 443. Linguistics. (G) 3 hours each term.

Nature and forms of language; the relation of language and culture; linguistic structure and change. Sound patterning (phonetics and phonemics) and grammatical structuring (morphology and syntax). Techniques of linguistic recording and analysis, working with a native speaker. Prerequisite: senior standing; Anth 207, 208, 209 or two years of a foreign language; consent of instructor. Smith, Stern.

Anth 444. Religion and Magic of Primitives. (G) 3 hours.

The religions and systems of magic of primitive peoples as reflections of their thought processes; supernatural systems in the life of primitive people. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

Anth 445. Folklore and Mythology of Primitives. (G) 3 hours.

Unwritten literature as an expression of the imaginative and creative thought of primitive people. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

Anth 446. Art Among Primitives. (G) 3 hours.

The artist and aesthetic expression among primitive peoples. Prerequisite: 9 hours in anthropology or consent of instructor. McFee, Stern.

Anth 450, 451, 452. Cultural Dynamics. (G) 3 hours each term.

Evaluation of approaches to the problem of cultural changes; analysis of invention and intergroup cultural borrowing; agents and conditions promoting change; mechanics of cultural growth; application of techniques for inducing change. Prerequisite: 9 hours in anthropology or consent of instructor. Barnett.

Anth 453. Primitive Value Systems. (G) 3 hours.

A comparative presentation and analysis of the differing world views of various primitive peoples. The basic premises and tenets revealed by an ethnic group in its interpretations of its experiences. Prerequisite: 9 hours of anthropology or senior standing in social science. Barnett.

Anth 454. Applied Anthropology. (G) 3 hours.

Study of case material in which anthropological assumptions, theories, and techniques have been applied to effect desired changes in intergroup relations. Problems of cross-cultural communication, conflict, and adjustment. Prerequisite: 9 hours in anthropology or senior standing in social science. Barnett.

Anth 455. Anthropology and Native Administration. (G) 3 hours.

Survey of present policies and techniques of native administration; application of anthropological facts and theory to the solution of practical problems; the impact of external demands on native cultures; satisfaction of social, economic, and psychological needs. Principal areas studied are Oceania and Africa, with some attention to parts of North America and Asia. Prerequisite: 9 hours of anthropology or senior standing in social science. Barnett.

Anth 456, 457, 458. Language, Culture, and Behavior. (G) 3 hours each term.

How people interact through verbal and nonverbal signals, codes, messages, and networks; an integration of anthropology with information theory and social psychology. Prerequisite: 9 hours in anthropology or consent of instructor. Smith.

Anth 475. Primate Behavior. (G) 3 hours.

Ecology and ethology of free-ranging primates. Classification, distribution, and ecological relationships of the living primates; social structure and social organization of a variety of species. Materials are drawn primarily from field studies; secondarily from laboratory studies. Prerequisite: upper division standing or consent of instructor. Simonds.

GRADUATE COURSES***Anth 501. Research.** Hours to be arranged.**Anth 502. Research Methods in Anthropology.** Hours to be arranged.

Orientation of graduate students to basic research tools, particularly the explicit inductive methods of statistical and other types of formal analysis needed to formulate and conduct research. Three terms are required of majors in the first year of graduate study. Jorgensen.

Anth 503. Thesis.** Hours to be arranged.Anth 505. Reading and Conference.** Hours to be arranged.**Anth 506. Special Problems.** Hours to be arranged.**Anth 507. Seminar.** Hours to be arranged.

Theory and Method of Archaeology. Dumond.

Anthropological Theory. Barnett.

Field Methods in Ethnology. Barnett.

The Negro in the New World. Dorjahn.

Primate Behavior. Simonds.

Fossil Man. Simonds.

Evolution and Race. Simonds.

Primitive Primates. Simonds.

Modern Mexico. Dumond.

Basic Physical Anthropology. Simonds.

Basic Archaeology. Stanislawski.

Archaeology of the Circumpolar Region. Dumond.

Archaeology of Western North America. Cole, Cressman, Dumond.

Problems of Modern Africa. Dorjahn.

West African Ethology. Dorjahn.

Reservation Indians. Jorgensen, McFee.

Modern Latin America. Young.

Anth 511. Culture, Society, and the Individual. 3 hours.

A review and evaluation of the concepts of culture and society, as the terms are employed by anthropologists. The relationships between culture and society, between culture and the individual, and between society and the individual. Prerequisite: graduate standing in the social sciences. Barnett.

Anth 512. The Beginnings of Civilization. 3 hours.

The change from a food-gathering to a food-producing economy; significance for cultural and social development. Prerequisite: graduate standing in the social sciences.

Anth 514. Primitive Social Organization. 3 hours.

Primitive social organization, with particular reference to kinship and sodalities. Prerequisite: graduate standing in social science. Jorgensen.

Anth 515. Primitive Political Systems. 3 hours.

Government in primitive societies, considered from a cross-cultural perspective. Special attention to political innovations under colonial rule, and to the new nationalistic administrations in Africa and Asia. Prerequisite: graduate standing in social science. Dorjahn.

Anth 516. Primitive Economic Systems. 3 hours.

Production, consumption, distribution, and exchange in primitive societies. Special attention to property, the economic surplus, change in economic systems, and relationships between nonpecuniary economies and the world economy. Prerequisite: graduate standing in social science. Dorjahn.

* No-grade course.

Anth 520, 521, 522. Advanced Physical Anthropology. 4 hours each term.

Observations and measurements of skeletons; morphological observations and anthropometry of the living. Genetic and morphological analysis of race. Dentition, biometric statistics, blood-group genetics and techniques. 2 three-hour laboratory periods. Prerequisite: Anth 320, 321, 322 or consent of instructor. Simonds, Bennett.

Anth 523, 524, 525. Archaeology of the New World. 3 hours each term.

Early man in the Americas. Fall: North America; winter: Meso-America; spring: South America. Dumond, Stanislawski.

Anth 530, 531, 532. Cultural Ecology. 3 hours each term.

Interrelationships of environment, technology, and social organization. In second and third terms, preparation and comparative analysis of case reports.

Asian Studies

THE ASIAN STUDIES PROGRAM offers area training in Asian civilizations, with emphasis on those of China and Japan. The program is designed to provide basic knowledge for students intending to do graduate work in Asian studies and for students with nonacademic vocational goals. The curriculum is administered by an advisory committee, of which G. Ralph Falconeri, assistant professor of history, is chairman.

The major in Asian studies leads to the Bachelor of Arts degree. Normally, a candidate is required to take two years of either Chinese or Japanese; another language may, however, be substituted if it is germane to the region or country in which the student has a special interest. The major requirements are as follows:

(1) All majors must take the following: Far East in Modern Times (Hst or PS 391, 392, 393); Eastern and Southeastern Asia (Geog 451); Peoples of Southern and Eastern Asia (Anth 438, 439, 440).

(2) The candidate must take 39 term hours of work from groups (a) and (b) below. At least 15 of these hours must be selected from two different disciplines within group (a).

(a) Lecture-seminar group: History of Oriental Art (ArH 207, 208, 209); Introduction to Japanese Literature (AL 301, 302, 303); Introduction to Chinese Literature (AL 307, 308, 309); Southern Asia in Modern Times (PS 337, 338, 339); Government and Politics of the Far East: China (PS 460, 461); History of China (Hst 494, 495, 496); History of Japan (Hst 497, 498, 499); Seminar: Religious Philosophy of China (R 407); Seminar: Religions in Japan (R 407); Seminar: Chinese Art (ArH 407); Seminar: China (Hst 407); Seminar: East Asia (Hst 407); Japan since 1912 (Hst 591); other approved seminars and colloquia.

(b) Language-course group: Chinese and Japanese language instruction; for courses, see page 161.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. Students entering with an undergraduate major in a discipline other than Asian Studies may elect (1) a program of studies without thesis or (2) a program with thesis; both programs lead to a master's degree in Asian studies. All other students must combine work in Asian studies with work in a departmental field of specialization, leading to two master's degrees: one in Asian studies and one in a specialized discipline. The candidate is further required to demonstrate competence, equivalent to the attainment expected after two years of college study, in an Asian language relevant to his program.

Biology

Professors: S. S. TEPPER (acting department head), C. W. CLANCY, M. J. COHEN, A. C. FABERGÉ, P. W. FRANK, PHILIP GRANT, GRAHAM HOYLE,* R. R. HUESTIS (emeritus), JAMES KEZER, AARON NOVICK,* EDWARD NOVITSKI,* P. L. RISLEY, B. T. SCHEER, J. A. SHOTWELL, A. L. SODERWALL, F. W. STAHL, GEORGE STREISINGER.

Associate Professors: A. S. BAJER, R. W. CASTENHOLZ, S. A. COOK, JANE GRAY, B. H. MCCONNAUGHEY, R. W. MORRIS, F. W. MUNZ,* F. P. SIPE (emeritus), W. R. SISTROM, D. E. WIMBER.

Assistant Professors: H. T. BONNETT, MALCOLM BURROWS, G. C. CARROLL, J. C. FENTRESS, D. R. HAGUE, J. R. MENNINGER, W. R. MOBERLY, A. O. WILLOWS.

Senior Instructor: K. B. SALMONSON.

Instructors: M. CHARLENE HEIMBIGNER, G. J. MURPHY, J. B. PALMER, BENJAMIN WALCOTT, H. P. WISNER.

Associates: C. C. ASHLEY, Z. M. BAJER, KATHLEEN CHURCH, W. J. DAVIS, C. G. JENSEN, LAWRENCE JENSEN, M. E. MYSEWSKI, V. R. MEENAKSHI, RALLAPALLI RAMAMURTHI, L. M. PASZTOR, HIROSHI WASHIO.

Assistants: LUCILLE B. ADAMSON, D. M. ALLEN, AMY V. ALPERT, BEVERLY S. ANDERSON, MARY E. AVERILL, R. W. BERRY, F. S. BERNSTEIN, D. E. BILDERBACK, B. A. BLANKSBY, JANE E. BOERNER, R. A. BREMILLER, C. H. BRINKMAN, K. E. BROOKS, J. W. BUELL, MARILYN L. CANFIELD, DIANA CHILDRESS, M. A. COGNARD, T. J. CONNORS, J. G. DARBY, FRED DELCOMYN, G. H. DERSHAM, D. L. DEWIS, JOANNE T. DONNELLY, ELIZABETH EHRLICH, R. E. ENNS, MARY A. EWERT, M. R. FREELING, FANNY FROMAGEOT, BETTY J. GIESEL, J. T. GIESEL, N. A. GRADWELL, K. L. GRAHAM, N. A. GRANHOLM, E. G. GREENE, G. C. GRIGG, L. N. HALFEN, J. C. HICKMAN, L. A. HOHNKE, SUSAN J. HUEMAN, M. H. KAPLAN, A. J. KARPOFF, NANCY I. KELLY, J. R. KOKE, G. H. KRASILOVSKY, R. W. LANGFORD, SANDRA L. LILICO, R. D. LONGLEY, ANNETTE E. MCCOUBREY, D. W. McDONALD, J. C. MALLON, RUTH J. MARBLE, J. W. MATES, J. C. MEEKS, A. C. MILLER, BETTY J. MOBERLY, M. W. MUMBACH, R. K. MURPHEY, LEONARD NISSENBAUM, J. R. NELSON, L. R. NORTHRUP, M. L. PATTON, A. W. PETERSON, C. M. PETERSON, BEVERLY K. PIERSON, L. H. PIKE, D. J. POLICANSKY, ZDENKA V. POSPISIL, KATHLEEN POETEET, J. C. RAYMOND, E. B. RIDGEWAY, BETTY ROLLEFSON, W. L. ROTTMAN, JEAN A. SCHACHT, M. J. SCHNEIDER, D. M. SEARS, GERALD SELZER, ELIZABETH S. SHELDON, R. M. SIERVOGEL, C. D. SMITH, P. T. SPIETH, JANICE P. STRINGER, W. C. TAYLOR, I. H. THORNEYCROFT, B. E. TOLBY, MARIA R. TROY, R. S. TURNER, J. L. WEBB, C. D. WHITE, R. L. WHITE, ALICE K. WIERSEMA, P. T. WISE, R. W. WISE, T. L. WITTENBERG, ALISON J. WOOD, S. C. WOOD, L. H. YAMAOKA.

THE DEPARTMENT OF BIOLOGY offers an undergraduate program planned to provide an understanding of the living world as a part of a liberal education, to prepare students for professional careers in industry, government, and secondary education, and to provide preparation for graduate work leading to careers in higher education, research, and the medical sciences.

Modern biology is a quantitative science; students planning to specialize in biology should include in their high-school preparation as much mathematics as possible, including at least algebra and geometry. Preparation in English is essential, and work in French, German, chemistry, and physics is highly desirable.

An extensive revision of the major requirements in biology is in progress. Students enrolled prior to 1968 may meet either the earlier requirements or the new requirements; new students must meet the new requirements: Cell Biology (Bi 301, 302, 303); Biology of Organisms (Bi 304, 305, 306); General Chemistry (Ch 104, 105, 106 or Ch 204, 205, 206); Analytical Laboratory (Ch 107, 108, 109 or

* On sabbatical leave 1967-68.

Ch 207, 208, 209); mathematics through Mth 106 or Mth 200; General Physics (Ph 201, 202, 203, and Ph 204, 205, 206); Organic Chemistry (Ch 331, 332, or Ch 334, 335); General Ecology (Bi 372); two additional terms of 400-level electives in biology. The two courses, Cell Biology (Bi 301, 302, 303) and Biology of Organisms (Bi 304, 305, 306), together with General Ecology (Bi 372), constitute a core curriculum in biology that conveys a body of information and thought essential to a student's understanding of modern biology regardless of his area of subsequent specialization. Students who intend to enter graduate work are urged to include calculus and two years of French, German, or Russian in their programs. The recommended program for biology majors, as well as for premedical and pre-dental students, includes mathematics and General Chemistry in the freshman year, but not biology; Organic Chemistry and either Bi 301, 302, 303 or Bi 304, 305, 306 in the sophomore year; the alternate biology sequence in the junior year, together with General Physics. Students with poor science backgrounds may take Bi 101, 102, 103 or Bi 104, 105, 106 in the freshman year, but these courses do not meet major requirements.

Students who plan to enter medical or dental school for their senior year may substitute courses in anatomy and physiology for Bi 372 and the electives. Pre-medical and pre-dental students should make sure that their programs meet the requirements of the schools they plan to enter, as well as those of his department.

Secondary-School Teaching of Biology. For certification as a teacher of biology in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in biology and the requirements for recommendation by the University of Oregon, the student should complete the major program outlined above. The mathematics and physics requirements will be liberalized for students who enter student teaching in the senior year; these students should complete Introductory College Mathematics (Mth 105) and may substitute Essentials of Physics (Ph 101, 102, 203) for General Physics (Ph 201, 202, 203). Laboratory and Field Methods in Biology (Bi 494) satisfies the certification requirements for Special Secondary Methods (Ed 408).

For further information, the student should consult the member of the biology faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Work. The department offers graduate work leading to the Doctor of Philosophy degree, and to the degrees of Master of Arts and Master of Science for students primarily interested in teaching careers in the high schools and junior colleges. The masters degrees are terminal in nature and are not normally taken before the Ph.D. degree. Candidates for higher degrees are expected to meet the equivalent of the University undergraduate major requirements before advancement to candidacy for the degree. Facilities are available for graduate study in most of the basic science areas of botany and zoology, including cytology, development, ecology, genetics, marine biology, microbiology, morphology, neurobiology, physiology (comparative, general, mammalian, and plant), and systematics. Interdisciplinary programs are offered in developmental biology, neurobiology, and molecular biology, involving the three departments of biology, chemistry, and psychology, as well as the Institute of Molecular Biology.

Institute of Marine Biology. The University operates the Oregon Institute of Marine Biology at Charleston on Coos Bay. The institute is located in a setting providing access to an unusual variety of richly populated marine and terrestrial habitats. A program of undergraduate and graduate studies is offered during the summer session.

Institute of Molecular Biology. A program of research and research instruction in areas of biology where phenomena can be understood in terms of the structure of molecules is conducted through the Institute of Molecular Biology. See INSTITUTE OF MOLECULAR BIOLOGY (page 124).

LOWER-DIVISION COURSES

Bi 101, 102, 103. General Biology. 4 hours each term.

Principles of life science, illustrated by studies of selected organisms. 3 lectures; 1 three-hour laboratory period. Does not satisfy requirements for the major.

Bi 104, 105, 106. Biological Science (Honors College). 5 hours each term.

Selected studies of biological principles, with emphasis on methods of observation, comparison, analysis, experiment, and synthesis in biological science. 3 lectures; 1 discussion; 1 two-hour laboratory period. Does not satisfy requirements for the major.

UPPER-DIVISION COURSES

(Bi 301, 302, 303 and Bi 304, 305, 306 or the equivalent are prerequisite to most upper-division courses in biology. Other prerequisites are indicated in the course descriptions.)

Bi 301, 302, 303. Cell Biology. 5 hours each term.

A coherent account of what is known about the growth and replication of cells and of the chemical mechanisms underlying these processes: structure, mode of action, and duplication of genetic material; the ways in which cells obtain material and energy for growth; the relation of structure to function in a variety of types of cells. 3 lectures; 2 laboratory-discussion periods. Prerequisite: one year of general chemistry; organic chemistry and college mathematics, prerequisite or taken concurrently.

Bi 304, 305, 306. Biology of Organisms. 5 hours each term.

An integrated presentation of the biology of representatives of important animal and plant phyla, including comparative study of their morphology, anatomy, life history, physiology, and development. 3 lectures; 2 laboratory-discussion periods. Prerequisite: one year of general chemistry; organic chemistry and college mathematics, prerequisite or taken concurrently.

Bi 312, 313. Human Physiology. 3 hours each term, fall and winter.

Required for majors in physical education, elective for others qualified. 2 lectures; 1 three-hour laboratory period. Prerequisite: one year of chemistry. Soderwall.

Bi 332. Plant Morphology. 4 hours.

Comparative study of the structure and life histories of representatives of the ferns, fern allies, and seed plants. 3 lectures; 2 three-hour laboratory periods. Tepfer.

Bi 334. Systematic Botany. 4 hours.

Principles of plant classification; common plant families; collection and identification of Oregon plants. Carroll.

Bi 355. Comparative Anatomy. 4 hours.

Systematic study, dissection, and identification of vertebrate structures and anatomical relations. 2 lectures; 2 three-hour laboratory periods. Not open to students who have credit for Bi 362, 363, 364. Morris.

Bi 356. Vertebrate Embryology. 4 hours.

Fertilization, morphogenesis, and differentiation of organ systems of vertebrates. 2 lectures; 2 three-hour laboratory periods. Not open to students who have credit for Bi 362, 363, 364. Risley.

Bi 361. Essentials of Invertebrate Zoology. 4 hours.

Morphology, anatomy, and general biology of the major phyla of invertebrate animals. 2 lectures; 2 three-hour laboratory periods. McConnaughey.

Bi 362, 363, 364. Vertebrate Zoology. 4 hours each term.

An integrated presentation of morphological, developmental, and functional features of the vertebrates. 2 lectures; 2 three-hour laboratory periods. Prerequisite: consent of instructor. Not open to students who have credit for Bi 355, Bi 356. Not offered 1968-69. Morris, Munz.

Bi 372. General Ecology. 4 hours.

Examination of the interrelationships between organisms and their environment. 3 lectures; 1 field trip a week.

Bi 381, 382. Introduction to Bacteriology. 3 hours each term, fall and winter.

Basic principles and techniques of bacteriology; role of bacteria and other micro-organisms in transformations of organic matter and in physical and chemical transformations in soil and water; their importance to man. 2 lectures; 2 two-hour laboratory periods. Prerequisite: general chemistry. McConnaughey.

Bi 391, 392. Human Anatomy. 3 hours each term.

Gross anatomy; the skeletal and muscular structure; the circulatory, respiratory, digestive, and neural systems and their functioning in physical activities. 2 lectures; 1 three-hour dissection period. Prerequisite: junior standing or consent of instructor. Sigereth.

Bi 401. Research.** Hours to be arranged.Bi 403. Thesis.** Hours to be arranged.***Bi 405. Reading and Conference.** Hours to be arranged.***Bi 407. Seminar.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT*****Bi 408. Laboratory Projects.** (G) Hours to be arranged.

Special laboratory training in research methods.

Bi 414, 415, 416. Comparative Physiology. (G) 4 hours each term.

Physiology of excitation, conduction, and muscular contraction in animals; nutrition, digestion, circulation, metabolism, excretion, and integration in the major animal phyla, in relation to ecology and the evolution of physiological function. 3 lectures; 1 discussion period. Prerequisite: organic chemistry, general physics, invertebrate zoology.

Bi 418, 419, 420. Comparative Physiology Laboratory. (G) 2 hours.

Laboratory work to accompany Bi 414, 415, 416. Emphasis on techniques of physiological investigation. Restricted to students intending to specialize in physiology or closely related fields.

Bi 422. Introduction to Genetics. (G) 4 hours.

An introduction to the fundamental principles of genetics. 3 lectures, 1 discussion period. Prerequisite: general chemistry and college algebra (Mth 105). Clancy, Novitski.

Bi 423. Genetics Laboratory. (G) 3 hours.

Fundamental principles of genetics illustrated by experiments with *Drosophila* and other organisms. 1 lecture, 2 three-hour laboratory periods. Prerequisite: Bi 422. Clancy.

Bi 424. Human Genetics. (G) 3 hours.

The immunogenetics of the blood groups and transplantation incompatibilities; sex determination and the sex ratio; spontaneous and induced mutation; radiation effects; the genetics of populations; selection, eugenics, and the genetic aspects of the human races. 3 lectures. Prerequisite: Bi 422. Novitski.

Bi 426. Evolution. (G) 3 hours.

Theories of biological variation, race, and species formation. 3 lectures. Prerequisite: Bi 422 or equivalent; senior or graduate standing.

* No-grade course.

Bi 428, 429. Cytology. (G) 4 hours each term, winter and spring.

Microscopic and submicroscopic structure of cytoplasm, and its relation to cell function; structure and behavior of chromosomes and other nuclear components. Methods of study and experimental procedures. 2 lectures, 2 three-hour laboratory periods. Wimber.

Bi 431. Microtechnique. (G) 2-4 hours.

Paraffin, squash technique, and handling of live cells. Theory and practice of light microscopes, photomicrography, and microcinematography. Two lectures. Prerequisite: senior standing. Bajer.

Bi 432. Fungi. (G) 4 hours.

Structure, physiology, and classification of fungi. 2 lectures; 2 three-hour laboratory periods. Carroll.

Bi 433. Algae. (G) 4 hours.

Structure, life histories, and ecology of representative fresh-water and marine algae. 2 lectures; 2 three-hour laboratory periods. Castenholz.

Bi 434. Plant Anatomy. (G) 4 hours.

Comparative study of the structure and development of cells, tissues, and organs of seed plants. 2 lectures; 2 three-hour laboratory periods.

Bi 435. Methods of Pollen Analysis. (G) 3 hours, spring term, alternate years.

A lecture-laboratory course concerned with the morphology of pollen, techniques of collection and preparation of pollen for study, and methods of pollen analysis. 2 three-hour combined lecture and laboratory meetings each week. Not offered 1968-69. Gray.

Bi 436. Cenozoic Paleobotany. (G) 3 hours, spring term, alternate years.

Distribution and dispersal of angiosperms and gymnosperms from the Cretaceous to the present as deduced from the fossil record. Major emphasis on the Tertiary, with world-wide coverage, but with principal examples, where possible, drawn from the Pacific Northwest. Emphasis on biogeographical and paleoecological aspects. Gray.

Bi 441. Plant Physiology. (G) 4 hours.

Growth, respiration, water relations, and functions of plant organs. 3 lectures, 1 three-hour laboratory period. Prerequisites: Cell physiology or equivalent and organic chemistry. Hague.

Bi 455. Histology. (G) 4 hours.

Systematic study, description, and identification of microscopic structures of vertebrate tissues. 2 lectures; 2 three-hour laboratory periods. Prerequisite: consent of instructor. Not offered 1968-69. Kezer.

Bi 463. Parasitology. (G) 4 hours.

Biological relationships of parasite and host, and the effect of such relationships on each. 2 lectures; 2 three-hour laboratory periods. Offered alternate years. McConnaughey.

Bi 471, 472, 473. Principles of Ecology. (G) 4 hours each term.

Fall: introduction to the ecosystem; interrelations between organisms and the physical environment, with emphasis on examples from higher plants. Winter: study of population; growth, structure, and species interactions. Spring: ecosystem energetics and structure, with intensive study of a few selected examples. 3 lectures; field work. Prerequisite: general chemistry, college algebra, and consent of instructor. Cook, Frank.

Bi 475. Aquatic Biology. (G) 3 hours.

The ecology of fresh-water organisms. 2 lectures; 1 field trip and laboratory period. Prerequisite: Bi 372 or Bi 471. Offered alternate years. Castenholz, Frank.

Bi 481, 482. Microbiology. (G) 3 hours winter, 5 hours spring.

Physiology and biochemistry of micro-organisms. The laboratory work is devoted to the isolation of various types of bacteria from nature and to the study of their physiologies. The lecture material covers: the cytology of bacteria,

growth of bacteria, aspects of bacterial metabolism and control mechanisms. 3 lectures only, winter term; 3 lectures and 2 laboratory periods during spring term. Prerequisite: cell physiology or biochemistry or the equivalent preparation and consent of instructor. Sistrom.

Bi 484, 485. Developmental Biology. (G) 3 hours each term.

A comparative review of developmental systems, with particular emphasis on problems of growth, cell division, cell interaction, and cytodifferentiation in animal systems. Emphasis on analyses at the molecular and cellular levels of organization in an effort to relate mechanisms at these levels with morphogenetic behavior at the organismic level. Lectures, laboratory (project type) and discussions, to be arranged each term. Prerequisite: Bi 356 or equivalent; Ch 461, 462, 463 or equivalent; prerequisites may be waived with consent of instructor. Grant.

Bi 491, 492, 493. Historical Biogeography. (G) 3 hours each term.

Fall: classification of mammals and mammalian morphology, with emphasis on comparative osteology. Winter: history of mammals; principles involved in their chronological distribution. Spring: biogeography and paleoecology. 2 lectures; 1 three-hour laboratory period. Prerequisite: senior standing in biology, geology, or anthropology. Offered alternate years. Shotwell.

Bi 494. Laboratory and Field Methods in Biology. (G) 4 hours, fall.

Designed especially for biology teachers in the secondary schools. Field collection, identification, and culturing of living material; utilization of this material in the biology teaching laboratory. Field trips for exploration of the various kinds of habitats found in the Pacific Northwest. Prerequisite: consent of instructor. Murphy.

Bi 495. History of Biological Ideas. (G) 3 hours.

Lectures, readings, and discussion of the historical origin and present status of leading biological ideas, and the contribution of biological thought to contemporary culture. Grant.

GRADUATE COURSES

***Bi 501. Research.** Hours to be arranged.

***Bi 502. Supervised College Teaching.** Hours to be arranged.

***Bi 503. Thesis.** Hours to be arranged.

***Bi 505. Reading and Conference.** Hours to be arranged.

***Bi 507. Seminar.** Hours to be arranged.

Animal Physiology.

Botany.

Developmental Biology.

Ecology.

Genetics.

Molecular Biology.

Radiation Biology.

Bi 510. Endocrinology Laboratory. 1-3 hours.

Laboratory work to accompany Bi 511, Bi 512, or Bi 513, conducted on a project basis.

Bi 511. Vertebrate Endocrinology. 3 hours.

The morphology and physiology of glands of internal secretion; their role in normal body function of the vertebrates. Soderwall.

Bi 512. Physiology of Reproduction. 3 hours.

Biochemical, histochemical, physiological, and other experimental approaches to problems in the physiology of reproduction. Soderwall, Risley.

Bi 513. Comparative Endocrinology. 3 hours.

The morphology and physiology of neurosecretory and other endocrine structures of the invertebrates and lower vertebrates. Scheer.

* No-grade course.

Bi 516, 517. Neurophysiological Basis of Behavior. 3 hours each term.

Physiology of the neuromuscular systems of animals, with emphasis on phylogenetic development and the evolution of animal behavior. Cohen, Hoyle, Pentress.

Bi 519. Neurophysiology Laboratory. 3 hours.

Laboratory work to accompany Bi 516, 517, with emphasis on the electrical techniques for study of nerve and muscle function. Cohen, Hoyle.

Bi 520, 521, 522. Advanced Genetics. 2 hours each term.

Selected topics from the following: gene action, mutation, chromosome mechanics, population genetics, statistical methods, radiation genetics. 2 lectures. Novitski.

Bi 523. Principles of Electron Microscopy. 2-4 hours.

The theory and application of techniques, for fixation, embedding, microscope operation, negative and positive staining, and metal shadowing.

Bi 526. Developmental Genetics. 3 hours.

Selected topics from the field of developmental and biochemical genetics. Lectures, discussion, and student reports on current literature. Prerequisite: general genetics, cellular physiology. Clancy.

Bi 531. Experimental Plant Morphogenesis. 4 hours.

Lectures and laboratory work demonstrating experimental modifications of plant growth; the significance of these modifications in relation to normal growth and development. Prerequisites: Bi 332, Bi 441, or consent of instructor. Bonnett.

Bi 537, 538, 539. Advanced Systematic Botany. 3 hours each term.

Classification, distribution, and speciation of seed plants of the Pacific Northwest. Prerequisite: plant morphology and systematic botany. Not offered 1968-69.

Bi 541. Advanced Plant Physiology. 3 hours.

Lectures on special aspects of plant respiration, salt metabolism, the photochemical reactions of photosynthesis, and on the role, mechanism of action, and metabolism of plant growth-substances. Prerequisite: plant physiology, cellular physiology.

Bi 544. Plant Physiology Laboratory. 2 or 3 hours.

Laboratory work in techniques used in plant-physiology research, with special emphasis on plant-tissue cultures. Prerequisite: plant physiology, biochemistry.

Bi 545. Physiology and Ecology of Algae. 3 hours.

Comparative physiology of freshwater and marine algae; ecological significance of physiological processes; annual cycles and limiting factors. Emphasis on experimental and theoretical approaches to the solution of ecological problems. 3 lectures. Offered alternate years. Castenholz.

Bi 551. Biology of Fishes. 4 hours.

The anatomy, development, and biology of fishes. Morris.

Bi 597, 598, 599. Advanced Biology. 3 hours each term.

Lectures, readings, and discussions of basic principles and recent advances in selected aspects of biological science, with special attention to the needs and problems of secondary-school teachers. Tepfer.

COURSES OFFERED ONLY IN SUMMER SESSIONS**Bi 417. Introduction to Mammalian Physiology.** (g) 4 hours.**Bi 439. Field Botany.** (G) 4 hours.**Bi 459. Field Ornithology.** (G) 3 hours.

*Bi 461, 462. **Invertebrate Zoology.** (G) 4 hours each term.

*Bi 467. **Marine Invertebrate Types.** (g) 3 hours.

*Bi 468. **Invertebrate Embryology.** (G) 4 hours.

*Bi 476. **Biology of Marine Organisms.** (G) 8 hours.

*Bi 477. **Planktonology.** (G) 4 hours.

*Bi 478. **Marine Ecology.** (G) 4 hours.

Bi 590. **Recent Advances in Biology.** 4 hours.

Chemistry

Professors: R. M. NOYES (department head), S. A. BERNHARD, V. BOEKELHEIDE, L. H. KLEMM, R. M. MAZO, W. L. PETICOLAS, F. J. REITHEL,† J. A. SCHELLMAN, W. T. SIMPSON, D. F. SWINEHART, P. H. VON HIPPEL, R. G. WOLFE.

Associate Professors: L. J. DOLBY, EDWARD HERBERT, O. P. MALHOTRA, G. G. GOLES.

Assistant Professors: O. H. GRIFFITH, J. F. W. KEANA, C. E. KLOPFENSTEIN, T. W. KOENIG, A. R. LARRABEE, M. R. PHILPOTT, J. S. SHABTAI.

Senior Instructor: R. J. BARNHARD.

Instructor: GERRIT DE WILDE.

Associates: FRANCES ACHEE, IAN BARNISH, HELMUT BIERE, EDITH BOEDFELD, IAN CALDER, RONALD COFFEE, C. A. ELLIGER, R. K. GERDING, B. A. HESS JR., THOMAS HOOKER, KORU KOIZUMI, H. A. KURMEIER, S. B. MATHUR, W. J. MUIZEBELT, DENNIS POSTLEWAITE, B. R. RUSSELL, CHARLOTTE SCHELLMAN, PAULHEINZ SCHWEITZER, S. L. TRIPP, JAN WIECZOREK, REINHARD ZELL.

Assistants: S. D. ADAMSON, E. H. ADLER, L. M. ALLEN, P. H. ANDERSON, T. E. BARKLOW, T. L. BARR, BARBARA A. BARTUSEK, J. E. BERNARDIN, G. V. BETTONEY, R. L. BEYER, W. L. BIGBEE, J. S. BLAND, W. A. BLOCH, B. J. CHASAN, R. L. CHRISTENSEN, C. C. CONTAXIS, M. E. CONRAD, T. M. CRAWFORD, W. L. CRANOR, S. C. CROFT, S. J. CROSS, R. T. CRUTHOFF, E. M. CUSTER, M. L. DEINZER, R. J. DINERSTEIN, N. L. EBERHART, M. C. EDELSON, L. O. EDWARDS, J. G. EISKAMP, J. D. EPSTEIN, SHERVIN ESFANDIARI, ZARAH ESFANDIARI, B. M. FANCONI, R. D. FEINMAN, V. A. FRIED, SALLY A. FOUCH, BARBARA B. GUNNINGS, L. W. GAY, PAOLO GRAMACCIONI, D. C. HARRIS, E. M. HERSHBERGER, H. J. HOFRICHTER, R. A. HOLLINS, JUDITH L. HOLT, G. A. HOWARD, J. G. HUNTINGTON, T. A. HYLTON, J. L. IVEY, R. D. JACQUOT, S. W. JOHN, W. O. JOHNSON, D. M. KAPLAN, SEIKO KATAGIRI, M. J. KELLY, R. C. KELLY, C. U. KIM, J. F. KUNSELMAN, SHOW-JY HO LAU, J. A. LAWSON, L. J. LIBERTINI, P. D. LORD, L. F. LOWDEN, MARGARET J. LOWE, S. L. LOWE, W. R. MABEY, R. A. MACQUARRIE, V. S. MADISON, M. H. MALLON, K. S. MARSHALL, F. P. MASON, D. A. MATHER, T. M. MCGUIRE, B. L. MCKINNEY, R. J. MILLIGAN, CHUP-YEW MOK, R. W. MORRIS, L. A. NAFIE, R. M. NEWTON, J. E. NOTTKE, D. P. OLSON, DENNIS O'RELL, E. W. PAUL, WENDELL PEPPERDINE, C. V. PHILLIPS, WILSON RADDING, C. E. RAMEY, R. M. RODIA, T. L. ROSENBERRY, SUSAN ROTTSCHAEFFER, SALLY G. SLOCUM, E. W. SMALL, RUTH A. SMITH, P. B. STEIN, R. A. TANNER, D. R. TAYLOR, D. C. TOMPKINS, J. H. TWETO, J. V. VANORNUM, A. S. WAGGONER, ELLEN E. WEDUM, L. M. WILLEY, W. Y. WEN, R. A. WIELESEK, J. F. WITTE, R. A. WOLF, C. C. WRIGHT, W. R. WOODWARD, W. K. WUN.

UNDERGRADUATE COURSES in chemistry are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Liberal Arts. They are also designed to provide a sub-

* Offered at the Institute of Marine Biology.

† On sabbatical leave 1967-68.

stantial foundation in chemistry for students interested in (1) advanced work in chemistry or other sciences, (2) teaching in colleges or secondary schools, (3) a career in industrial chemistry, and (4) premedical or pre dental studies.

The high-school preparation of a prospective chemistry major should include as much mathematics as possible. One year each of algebra and geometry is a minimum. Students entering with insufficient preparation in mathematics must remedy their deficiencies in elementary courses offered by the University. Substantial preparation in English, social science, literature, and foreign languages is expected. High-school work in chemistry and physics is desirable but not required.

The department offers Honors General Chemistry with accompanying laboratory (Ch 204, 205, 206 and Ch 207, 208, 209). Registration is open to Honors College students and to a selected group of superior students. Selection is made chiefly on the basis of excellence of background in mathematics.

The recommended curriculum for majors includes the following courses in chemistry and related fields (variations in order may be approved by the department):

Freshman Year. General Chemistry (Ch 104, 105, 106 with Ch 107, 108, 109, followed in a subsequent year by Ch 320, or Ch 204, 205, 206 with Ch 207, 208, 209); a year sequence in mathematics (mathematics placement is determined by high school records supplemented by College Board scores); German.

Sophomore Year. Organic Chemistry (Ch 334, 335, 336); Organic Chemistry Laboratory (Ch 340, 341, 342); General Physics (Ph 201, 202, 203, Ph 204, 205, 206); Calculus with Analytical Geometry (Mth 200, 201, 202), if not taken in the freshman year; German.

Junior Year. Physical Chemistry (Ch 441, 442, 443); Physical-Chemical Measurements (Ch 446, 447, 448); Biochemistry (Ch 461, 462, 463) for students intending to do graduate work in this field.

Senior Year. Research (Ch 401); an additional sequence in chemistry at the senior level.

The additional advanced sequence in the senior year may be elected from such courses as Physical-Inorganic Chemistry (Ch 411, 412), Biochemistry (Ch 461, 462, 463, Ch 464), Chemical Thermodynamics (Ch 551, 552), Advanced Organic Chemistry (Ch 531, 532, 533), Chemical Kinetics (Ch 541, 542, 543), Quantum Chemistry (Ch 544, 545, 546), Statistical Thermodynamics (Ch 553, 554).

The recommendations for the major outlined above meet the specifications of the Committee on Undergraduate Training of the American Chemical Society. Upon notification by the Department of Chemistry, the Society issues certificates to students who successfully complete the recommended curriculum. Students who desire a less specialized major, without American Chemical Society certification, may omit German and the extra chemistry sequence in the senior year.

Students who do not earn a grade of C or better in first-year chemistry courses are not permitted to enroll in second-year courses; however, they have the option to repeat the first-year chemistry course in which they received a grade lower than C.

To be recommended for the bachelor's degree with a major in chemistry, a student must have earned a minimum GPA of 2.00 in courses in chemistry, physics, and mathematics.

To be eligible for enrollment in upper-division courses in chemistry, transfer students who plan a major in chemistry must have a college GPA of 2.75 or higher.

Secondary-School Teaching in Chemistry. For certification as a teacher of chemistry in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in chemistry and the requirements for recommendation by the University of Oregon, the student is advised to take the following courses: General Chemistry (Ch 104, 105, 106); General Chemistry Laboratory (Ch 107); Inorganic Qualitative Analysis (Ch 108); Introductory Volumetric Analysis (Ch 109); Organic Chemistry (Ch 334, 335, 336); Organic Chemistry Laboratory (Ch 337, 338); Quantitative Analysis (Ch 320). These courses provide acquaintance with several fields of chemistry. The program does not satisfy the requirements for a bachelor's degree with a major in chemistry. Normally, students intending to teach chemistry in secondary schools meet the requirements for a bachelor's degree with a major in general science. Additional courses for secondary-school teachers are offered in the summer sessions.

For further information, the student should consult the member of the chemistry faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Undergraduate Research Fellowships. Through a grant from the National Science Foundation, the department offers a number of undergraduate research participation fellowships to qualified junior and senior chemistry majors. The stipends are, on the average, \$200 for the academic year and \$600 for the summer months. Inquiries about the program should be addressed to the department head.

Graduate Study. The Department of Chemistry offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Detailed information is published in the Graduate School Catalog.

The department is prepared to accept Ph.D. candidates for work in the following fields of chemistry: physical chemistry, chemical physics, organic chemistry, theoretical chemistry, biochemistry, and inorganic chemistry.

LOWER-DIVISION COURSES

Ch 101, 102, 103. **Elementary Chemistry.** 4 hours each term.

A brief presentation of some of the major areas of chemistry. Does not satisfy prerequisite for upper-division courses in chemistry. 3 lectures, 1 discussion period fall term; 2 lectures, 1 discussion period, 1 three-hour laboratory winter and spring.

Ch 104, 105, 106. **General Chemistry.** 3 hours each term.

An introduction to the field of chemistry, providing an understanding of the structures of atoms, molecules, and ions and their interactions, and a foundation for the further study of chemistry. 3 lectures. Prerequisite: Mth 95 or equivalent.

Ch 107. **Introductory Chemistry Laboratory.** 2 hours fall.

Experiments related to fundamental chemical principles. 1 lecture-discussion and 1 three-hour laboratory period. Must be taken concurrently with Ch 104 unless excused by laboratory instructor. Prerequisite: Mth 95 or equivalent.

Ch 108. **Introductory Analytical Chemistry I.** 2 hours winter.

Ch 109. **Introductory Analytical Chemistry II.** 2 hours spring.

The two terms' work in Ch 108 and Ch 109 covers the separation and identification of cations and anions by semi-micro methods and an introduction to volumetric analysis. Must be taken concurrently with the last two terms of Ch 104, 105, 106 unless this requirement is waived by the laboratory instructor. Prerequisite: Ch 107.

Ch 204, 205, 206. General Chemistry. 3 hours each term.

First-year college chemistry for selected students with excellent backgrounds in high-school chemistry, physics, and mathematics. Quantitative and theoretical aspects of the subject emphasized, with less descriptive material than in Ch 104, 105, 106. Open to Honors College students and other well-prepared students. Selection is based chiefly on mathematics preparation. 3 lectures.

Ch 207. Semi-micro Inorganic Qualitative Analysis. 3 hours fall.

The separation and identification of cations and anions by semi-micro methods. Planned to accompany Ch 104 or Ch 204. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. 2 three-hour laboratory periods; 1 lecture period.

Ch 208. Volumetric Analysis. 3 hours winter.

The quantitative estimation of selected molecular species by titration procedures. Planned to accompany Ch 105 or Ch 205. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. 2 three-hour laboratory periods; 1 lecture period.

Ch 209. Gravimetric Analysis. 3 hours spring.

The separation and gravimetric determination of selected inorganic species. Planned to accompany Ch 106 or Ch 206. Intended primarily for prospective chemistry majors and Honors College students. Admission limited to selected students. 2 three-hour laboratory periods; 1 lecture period.

UPPER-DIVISION COURSES**Ch 320. Quantitative Analysis.** 4 hours spring.

Laboratory work devoted mainly to volumetric analysis. Satisfies the requirements in quantitative analysis for admission to medical or dental schools. Not intended for chemistry majors. 2 lectures; 2 three-hour laboratory periods. Prerequisite: Ch 106 or Ch 206; Ch 109 or Ch 209.

Ch 331, 332. Organic Chemistry. 3 hours each term.

A study of the compounds of carbon, their structure, reactions and applications. Designed for biology majors, medical technicians, premedical and pre dental students. 3 lectures. Prerequisite: Ch 106 or Ch 206 with a grade of C or better.

Ch 334, 335, 336. Organic Chemistry. 3 hours each term.

A comprehensive study of the chemistry of the compounds of carbon. Required for chemistry majors; open to Honors College students and others desiring a more extensive coverage of organic chemistry. 3 lectures. Prerequisite: Ch 106 or Ch 206 with a grade of C or better.

Ch 337, 338. Introductory Organic Laboratory. 2 hours each term, fall and winter.

Introduction to the principles and techniques of laboratory practice in organic chemistry. Prerequisite: Ch 109 or Ch 209 with a grade of C or better. 1 lecture; 1 three-hour laboratory period.

Ch 340, 341, 342. Organic Chemistry Laboratory. 2-3 hours per term.

A survey of the principles and techniques fundamental to laboratory practice in organic chemistry, including aspects of both qualitative and quantitative organic analysis. Prerequisite: Ch 109 or Ch 209 with a grade of C or better. Required for chemistry majors; open to Honors College students by selection, and to others desiring a more intensive training in laboratory practice than is provided in Ch 337, 338. 1 lecture; 2 three-hour laboratory periods.

Ch 401. Research. Hours to be arranged.

For advanced undergraduates. An introduction to the methods of chemical investigation.

Ch 403. Thesis. Hours to be arranged.

Open only to students eligible to work for the bachelor's degree with honors in chemistry.

Ch 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ch 409. Special Laboratory Problems. (G) Hours to be arranged.

Provides laboratory instruction not classifiable as research; laboratory work covered in other courses is not duplicated. Prerequisite: consent of instructor.

Ch 411, 412. Physical-Inorganic Chemistry. (G) 3 hours each term, fall and winter.

A comprehensive study of the structure, properties, and reactions of atomic and molecular species in the various states of aggregation. Prerequisite: three years of college chemistry.

Ch 416. Kinetics in Solution. (G) 3 hours.

Theories of rates of homogeneous reactions in solution; application to the elucidation of the mechanisms of chemical reactions. Prerequisite: physical chemistry. Offered alternate years.

Ch 441, 442, 443. Physical Chemistry. (g) 4 hours each term.

Comprehensive study of the theoretical aspects of physical-chemical phenomena. Atomic and molecular properties; macroscopic systems in equilibrium; nonequilibrium macroscopic systems. 4 lectures. Prerequisite: two years of college chemistry (except for physics majors), one year of calculus.

Ch 446, 447, 448. Physical-Chemical Measurements. (g) 2 hours each term.

Analytical applications of electrical and optical instruments; techniques of physical chemistry, including basic electronic, potentiometric, electrical, optical spectroscopic, and high-vacuum methods; experiments include thermodynamic and kinetic measurements and a short research project. Prerequisite: Ch 108, Ch 109 or Ch 208, Ch 209; Ch 441, 442, 443 (may be taken concurrently). 2 three-hour laboratory periods.

Ch 461, 462, 463. Biochemistry. (G) 3 hours each term.

Chemical interpretation of biological phenomena; study of compounds having biological significance. 3 lectures. Prerequisite: Ch 108, Ch 109 or Ch 208, Ch 209; knowledge of organic and physical chemistry and biology.

Ch 464. Biochemistry Laboratory. (G) 3 hours fall.

Designed to illustrate approaches currently being used in research in enzyme kinetics, enzyme purification, structure of nucleic acids and peptides, protein synthesis in cell-free systems, nucleic acid coding, and biochemical pathways in bacterial mutants. 2 three-hour laboratory periods; 1 one-hour conference. Selected students may continue laboratory work in winter and spring terms under Ch 409. Prerequisite: consent of instructor.

GRADUATE COURSES

Ch 501. Research.** Hours to be arranged.Ch 503. Thesis.** Hours to be arranged.**Ch 505. Reading and Conference.** Hours to be arranged.***Ch 507. Seminar.** 1 hour each term.

Seminars offered in physical chemistry, organic chemistry, and biochemistry.

Ch 508. Special Topics in Theoretical Chemistry. 2 or 3 hours.

Topics in thermodynamics (equilibrium and nonequilibrium), statistical thermodynamics, or quantum chemistry.

Ch 531, 532, 533. Advanced Organic Chemistry. 3 hours each term.

Advanced general survey of organic chemistry; structural theory, syntheses, scope and mechanism of reactions.

Ch 534, 535, 536. Special Topics in Organic Chemistry. 2 or 3 hours each term.

Discussion of advanced topics selected from: carbocyclic and heterocyclic compounds, surface reactions and catalysis, stereochemistry, physical-organic concepts.

* No-grade course.

Ch 541, 542, 543. Chemical Kinetics. 3 hours each term.

The work of each term is selected from such topics as: classical kinetic theory of gases, statistical mechanics, statistical thermodynamics, chemical kinetics in the gas phase and in solution, catalysis. Offered alternate years.

Ch 544, 545, 546. Quantum Chemistry. 2 or 3 hours each term.

Topics of chemical interest discussed in terms of the quantum theory. Introduction to wave mechanics, discussion of chemical bonding and the origin of the theory of resonance, and topics from atomic and molecular spectra.

Ch 551, 552. Chemical Thermodynamics. 3 hours each term, fall and winter.

The laws of thermodynamics and their applications to gases, liquids, solids, phase equilibria, solutions, electrolytes, chemical equilibria, electrochemistry, surfaces, elasticity, external fields, etc.

Ch 553, 554. Statistical Thermodynamics. 3 hours each term, fall and winter.

Molecular interpretation of the properties of equilibrium systems; principles and applications to gases, crystals, liquids, phase transitions, solutions, electrolytes, gas adsorption, polymers, chemical equilibria, etc. Offered alternate years. Students may take Ph 451, 452, 453 when Ch 553, 554 are not offered.

Ch 561, 562, 563. Enzymes and Intermediary Metabolism. 2 or 3 hours each term.

Enzyme kinetics and detailed consideration of glycolysis, biological oxidation, lipid metabolism, and selected biological synthesis.

Ch 564, 565, 566. Physical Biochemistry. 2 or 3 hours each term.

The physical properties of biological macromolecules; proteins, nucleic acids, and viruses. The relationship between the molecular conformation and the special chemical, physical, and biological properties of these various macromolecules. Prerequisites: calculus and a knowledge of the elements of solution thermodynamics.

COURSES OFFERED ONLY IN SUMMER SESSIONS**Ch 419. Advanced General Chemistry.** (g) 4 or 5 hours.**Ch 429. Survey of Analytical Chemistry.** (g) 4 or 5 hours.**Ch 439. Survey of Organic Chemistry.** (g) 4 or 5 hours.

Classics, and Chinese and Japanese

Professor: F. M. COMBELLACK (department head).

Associate Professor: C. B. PASCAL.*

Assistant Professors: C. M. BLACK, W. E. NAFF, EDNA LANDROS (emeritus), ANGELA PALANDRI, STEPHEN C. SHUCARD.

Senior Instructor: CLARA SHU-YI SUN.

Instructors: YASUKO KAJII, J. L. REAVIS.

Assistants: JANE M. ARCHIBALD, N. T. CHAO, CAROLYN R. HORNER, YOKO MCCLAINE, KEIKO IWAI McDONALD, J. F. POWERS, JULIUS RIVERS, BERNADETTE WU.

THE DEPARTMENT OF CLASSICS, AND CHINESE AND JAPANESE offers two distinct programs of study:

Classics: The aim of the program in classics is to equip students to deal directly with the civilizations of Greece and Rome by giving them the necessary command of Greek and Latin and providing a variety of courses covering the

* On leave of absence 1967-68.

most important Greek and Latin poets, historians, orators, and philosophers. Courses in Greek and Roman history are offered by the Department of History and courses in ancient art and archaeology by the School of Architecture and Allied Arts.

Chinese and Japanese: The aim of the program in Chinese and Japanese is to equip students to deal directly with both the traditional and the contemporary civilizations of China and Japan by providing the necessary command of Chinese and Japanese and additional directed study to meet needs for advanced specialized instruction. Courses of value to majors in Chinese or Japanese are also offered by the departments of Anthropology, History, and Political Science and the School of Architecture and Allied Arts. The faculty in Chinese and Japanese participates in the undergraduate and graduate interdisciplinary programs in Asian Studies.

Major Requirements. Major requirements for the Bachelor of Arts degree are as follows:

Classics. Twenty-four term hours in Greek or Latin beyond the second-year sequence; History of Greece (Hst 411), History of Rome (Hst 412, 413). Majors in Greek or Latin are normally expected to take work in the other classical language and should, if possible, also take some work in a modern language. Students planning to do graduate work in Classics are urged to take German.

Chinese. Fifteen term hours beyond the second-year sequence; 15 term hours in Japanese; Introduction to Chinese Literature (AL 307, 308, 309); History of China (Hst 494, 495, 496). Majors in Chinese are also expected to develop a strong supporting field in some subject such as English, a European language and literature, or one of the social sciences.

Japanese. Fifteen term hours beyond the second-year sequence; 15 term hours in Chinese; Introduction to Japanese Literature (AL 301, 302, 303); History of Japan (Hst 497, 498, 499). Majors in Japanese are also expected to develop a strong supporting field in some subject such as English, a European language and literature, or one of the social sciences.

Secondary-School Teaching of Latin. For certification as a teacher of Latin in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution in which the student completes his subject preparation.

Completion of 45 term hours of work in Latin satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon. Students planning to enter secondary-school teaching should consult the School of Education about requirements and specific recommended courses.

For permanent certification, after a fifth year of preparation, the student must complete an additional 15 term hours in linguistics, culture, and civilization. The following courses are recommended: AL 450, 451; Hst 411, 412, 413.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. Graduate programs are offered in Classics leading to the degree of Master of Arts in (1) Greek, (2) Latin, and (3) Classics. In either (1) or (2) the student concentrates his graduate work in either Greek or Latin. In (3) the student takes graduate work in both Greek and Latin. Students working toward a degree in either Greek or Latin will ordinarily be expected to take some work in the other language unless they have already done so. Students who have not already had a year course in ancient history will be expected to include ancient history in their graduate program. A thesis is not required for the Master of Arts degree in this department, but may be elected.

Greek

LOWER-DIVISION COURSES

- CL 50, 51. **Beginning Greek.** 4 hours each term.
The fundamentals of the Attic Greek language. Black, Pascal.
- CL 52. **Introduction to Xenophon.** 4 hours.
Reading of the first four books of Xenophon's *Anabasis*. Black, Pascal.
- CL 101, 102. **Introduction to Homer.** 4 hours each term.
Reading of Books I-VI of the *Iliad*. The Homeric dialect; practice with the Homeric meter. Lectures on the Homeric Age. Combellack, Black, Pascal.
- CL 103. **Introduction to Plato.** 4 hours.
Reading of the *Euthyphro*, *Crito*, and *Apology*. Combellack, Black, Pascal.
- CL 231, 232. **New Testament Readings.** 4 hours each term.
Selected readings from the Gospels and Paul's Epistles. May be followed by CL 103 or CL 316 to complete a year sequence.

UPPER-DIVISION COURSES

- AL 304, 305, 306. **Literature of the Ancient World.** 3 hours each term.
For description, see page 136. Combellack.
- AL 321, 322, 323. **Classic Myths.** 1 hour each term.
For description, see page 136. Pascal.
- CL 314, 315. **Introduction to Homer.** 4 hours each term.
For description, see CL 101, 102. Not open to students who have completed that sequence. Combellack.
- CL 316. **Introduction to Plato.** 4 hours.
For description, see CL 103. Not open to students who have completed that course. Combellack.
- CL 317. **Euripides.** 3 hours.
Reading of *Alcestis* and *Electra*. Lectures on Greek stage antiquities. Combellack.
- CL 318. **Herodotus.** 3 hours.
Reading of selections from Herodotus' *History*. Study of the Ionic dialect. Combellack.
- CL 319. **Aristophanes.** 3 hours.
Reading of *The Frogs* and one or two other plays. Aristophanes as a literary critic. Lectures on Greek comedy. Combellack.
- CL 320. **Sophocles.** 3 hours.
Reading, in alternate years, of the Trojan and the Theban plays. Combellack.
- CL 321. **Demosthenes.** 3 hours.
Reading of the *De corona*. Lectures on the Attic orators. Combellack.
- CL 351, 352, 353. **Greek Prose Composition.** 1 hour each term.
- CL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- CL 407. **Greek Seminar.** (G) Hours to be arranged.
- CL 411. **Thucydides.** (G) 3 hours.
Reading of selections from the *History of the Peloponnesian War*. Lectures on fifth-century Athens. Combellack.
- CL 412. **Aeschylus.** (G) 3 hours.
Reading of the *Oresteia*. Pascal, Combellack.

CL 413. Theocritus. (G) 3 hours.

Reading of Theocritus and selections from other Greek bucolic poets. Lectures on ancient pastoral poetry and its influence. Pascal, Combellack.

CL 414. Plato's Republic. (G) 3 hours.

Reading of the *Republic*, with special attention to Plato's literary art and to his attitude toward literature. Pascal, Combellack.

CL 415. Aristotle's Ethics. (G) 3 hours.

Reading of the *Nicomachean Ethics*. Lectures on ancient ethical theories and on Aristotle's relationship to Plato. Combellack.

CL 416. Greek Lyric Poetry. (G) 3 hours.

Readings from the lyric poets, including the elegiac poets. Combellack.

GRADUATE COURSES***CL 503. Thesis.** Hours to be arranged.**CL 505. Reading and Conference.** Hours to be arranged.**CL 507. Greek Seminar.** Hours to be arranged.**CL 517, 518, 519. Studies in Greek Literature.** Hours to be arranged.

Introduction to methods and materials for research in the classics; special attention to literary problems. Study of one of the following: Homer's *Odyssey*, Sophocles, Thucydides, Plato's *Republic*, Alexandrian poetry. Combellack.

Latin**LOWER-DIVISION COURSES****CL 60, 61, 62. First-Year Latin.** 4 hours each term.

Fall and winter: fundamentals of Latin grammar; spring: selected readings from Caesar.

CL 104. Cicero's Orations. 4 hours.

Reading of selected orations, with close study of classical Latin forms and constructions as exemplified in Cicero's speeches.

CL 105. Virgil's Aeneid. 4 hours.

Reading of the first six books of the *Aeneid*. Practice in reading Latin hexameter.

CL 106. Terence. 4 hours.

Reading of a representative comedy of Terence. Survey of the early Roman theater.

UPPER-DIVISION COURSES**CL 301. Livy.** 3 hours.

Reading of Books I and II, with attention to Livy's prose style and especially his narrative technique. Pascal.

CL 302. Virgil's Eclogues and Georgics. 3 hours.

Selected readings from the earlier poetic works of Virgil. Pascal.

CL 303. Horace's Odes. 3 hours.

Selected odes from the four books. Special attention to Horace's employment of the lyric form to express national ideals as well as personal thought and emotion. Pascal.

AL 304, 305, 306. Literature of the Ancient World. 3 hours each term.

For description, see page 136. Combellack.

AL 321, 322, 323. Classic Myths. 1 hour each term.

For description, see page 136. Pascal.

* No-grade course.

CL 341. Horace's Satires and Epistles. 3 hours.

Reading of selections from the *Satires* and *Epistles*. Study of the Horatian technique of satire. Pascal.

CL 342. Pliny and Martial. 3 hours.

Selected letters of Pliny and epigrams of Martial. Development of Silver Latin as seen in a representative prose writer and poet; the literary and historical trends in Rome of the first and early second century A.D. Pascal.

CL 343. Tacitus' Agricola and Germania. 3 hours.

Close study of Tacitean style in the earlier works. Pascal.

CL 345. Ovid's Metamorphoses. 3 hours.

Reading of some of the major myths. Study of Ovid's storytelling technique. Pascal.

CL 346. Petronius' Cena Trimalchionis. 3 hours.

Reading of the entire *Cena*. Petronius' role in the development of the picaresque novel. Special attention to the colloquial Latin spoken by the characters in the *Cena*. Pascal.

CL 347, 348, 349. Latin Composition. 1 hour each term.

Survey of classical Latin syntax; extensive practice in prose composition. Designed for majors and prospective teachers. Pascal.

CL 361. Cicero's Philosophical Works. 3 hours.

Reading of the *Tusculan Disputations* and the *De officiis*. Cicero's role as an eclectic philosopher. Black.

CL 362. Lucretius. 3 hours.

Reading of Book I and other selections from the *De rerum natura*. Review of ancient atomic theory. Close study of the Lucretian hexameter. Black.

CL 363. Catullus. 3 hours.

Reading and analysis of both the "personal" and Alexandrian poems. The political and social background of Catullus' poetry. Black.

CL 405. Reading and Conference. Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****CL 408. Latin Seminar.** (G) Hours to be arranged.**CL 447, 448, 449. Latin Prose Composition.** (G) 1 hour each term.

Composition of continuous Latin prose based on an intensive study of stylistic models from classical literature. Prerequisite: CL 347, 348, 349 or graduate standing.

CL 461. Propertius and Tibullus. (G) 3 hours.

Reading of works of Propertius and Tibullus. Comparison of the poetic styles of these two Augustan poets. Combella.

CL 462. Juvenal. (G) 3 hours.

Reading of the selected satires. Juvenal's relation to the Roman tradition of satire. Pascal.

CL 463. Tacitus' Annals. (G) 3 hours.

Reading of the first six books of the *Annals*. Analysis of Tacitus' style. His importance as an interpreter of the early empire. Pascal.

GRADUATE COURSES***CL 503. Thesis.** Hours to be arranged.**CL 505. Reading and Conference.** Hours to be arranged.**CL 508. Latin Seminar.** Hours to be arranged.**CL 511, 512, 513. Readings in Mediaeval Latin.** Hours to be arranged.

* No-grade course.

CL 514, 515, 516. **Studies in Latin Literature.** Hours to be arranged.

Intensive study of one of the following, with special attention to literary problems: Latin epic, Augustan elegy. Combellack, Pascal.

Chinese and Japanese

LOWER-DIVISION COURSES

OL 50, 51, 52. **First-Year Chinese.** 5 hours each term.

Colloquial Chinese (Peking); approximately half the year devoted to the oral-aural approach to conversation, and the other half to the reading and writing of materials in Chinese characters. Palandri, Sun.

OL 60, 61, 62. **First-Year Japanese.** 5 hours each term.

Colloquial Japanese (Tokyo); approximately half the year devoted to the oral-aural approach to conversation, and the other half to the reading and writing of materials in characters and the syllabaries. Miyaji.

OL 101, 102, 103. **Second-Year Chinese.** 5 hours each term.

Continuation of OL 50, 51, 52, with the systematic addition of new characters and styles; designed to increase fluency in conversation, reading, and writing. Palandri, Sun.

OL 104, 105, 106. **Second-Year Japanese.** 5 hours each term.

Continuation of OL 60, 61, 62, with the systematic addition of new characters and styles; designed to increase fluency in conversation, reading, and writing. Naff.

UPPER-DIVISION COURSES

AL 301, 302, 303. **Introduction to Japanese Literature.** 3 hours each term.

For description, see page 136. Naff.

AL 307, 308, 309. **Introduction to Chinese Literature.** 3 hours each term.

For description, see page 136. Palandri, Sun.

OL 311, 312, 313. **Third-Year Chinese.** 5 hours each term.

Advanced readings in contemporary Chinese; introduction to classical, documentary, and historical texts. Palandri, Sun.

OL 314, 315, 316. **Third-Year Japanese.** 5 hours each term.

Advanced readings in modern documentary and literary Japanese; use of standard reference materials and introduction to the classical language. Miyaji.

OL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

OL 411, 412, 413. **Classical Japanese.** (g) 3 hours each term.

Reading from each of the major periods of premodern Japanese (archaic, classical, mediaeval, and early modern) as a preparation for research or literary studies. Naff.

OL 414, 415, 416. **Classical Chinese.** (g) 3 hours each term.

Study of various styles and genres of classical Chinese literature; reading of documentary material of classical Chinese. Prerequisite: OL 311, 312, 313.

Comparative Literature

THE UNIVERSITY OFFERS a program of graduate study in comparative literature, leading to the M.A. and Ph.D. degrees. The program is administered by a faculty committee drawn from the departments of English; Classics, and Chinese and Japanese; German and Russian; Romance Languages. Dr. Chandler B. Beall, professor of Romance languages, is chairman of the committee.

While the student's program includes courses and seminars in comparative literature, the greater portion of his work is selected from advanced offerings in the classics and in English, German, Romance, and Slavic literatures. Command of at least two foreign languages, ancient or modern, is required for admission.

Doctoral candidates must work in at least three literatures, one of which may be English, and must demonstrate competence in three foreign languages, one of which must be Latin or Greek.

COMPARATIVE LITERATURE, the official journal of the American Comparative Literature Association, is published quarterly by the University of Oregon.

Dentistry, Preparatory

THE COUNCIL ON DENTAL EDUCATION of the American Dental Association has established the following minimum requirements for admission to approved dental schools: at least 90 term hours of collegiate courses, including one year of English, one year of general chemistry, one year of biology or zoology, one year of physics, and one-half year of organic chemistry; a grade-point average of at least 2.00.

The University offers a three-year predental curriculum, which satisfies these requirements, to prepare students for admission to the University of Oregon Dental School and other accredited dental schools. The completion of this curriculum and two years of dental-school work satisfies all requirements for a bachelor's degree from the University with a major in general science. With the proper choice of electives in the predental curriculum, the student may qualify for a bachelor's degree with a major in biology.

Students who expect to complete the requirements for a bachelor's degree at the Dental School should satisfy, in their predental program, all requirements for the degree (including general University requirements and requirements for a major in the College of Liberal Arts) that cannot be satisfied with work taken at the Dental School. For general University requirements for a bachelor's degree, see pages 90 ff.

Although a bachelor's degree is not prerequisite to a professional degree in dentistry, the University of Oregon Dental School and most other dental schools recommend that their students qualify for this degree in addition to the professional degree.

Predental students are advised to begin correspondence with the University of Oregon Dental School or the dental school they plan to attend during the spring term of their first year at the University. Aptitude tests given by the American Dental Association should be taken not later than the fall term one year before admission; applications to take this test must be made well in advance of the scheduled date of the test. Predental students should consult the Dental School Catalog for dates.

The following courses satisfy both the science requirements for admission to the University of Oregon Dental School and, with additional science instruction at the Dental School, the requirements for a major in general science:

	Term Hours
Mathematics (above level of Mth 10).....	12
General Chemistry (Ch 104, 105, 106).....	9
Introductory Chemistry Laboratory (Ch 107), Inorganic Qualitative Analysis (Ch 108), Introductory Volumetric Analysis (Ch 109).....	6
Organic Chemistry (Ch 334, 335, Ch 337).....	9
General Biology (Bi 101, 102, 103).....	12
Upper-division biology (Bi 355, Bi 356 recommended).....	8
General Physics (Ph 201, 202, 203, Ph 204, 205, 206).....	15

One term of Sculpture (Art 293) or Jewelry (Art 257) is recommended as an elective.

Economics

Professors: ROBERT CAMPBELL (department head), R. L. ALLEN,* CALVIN CRUMBAKER (emeritus), R. M. DAVIS,† C. D. EDWARDS, J. H. GILBERT (emeritus), P. L. KLEINSORGE, H. T. KOPLIN, R. F. MIKESELL, V. P. MORRIS (emeritus), B. N. SIEGEL,† P. B. SIMPSON, M. D. WATTLES.

Associate Professors: G. O. BIERWAG, H. N. GOLDSTEIN, M. A. GROVE,* R. E. SMITH, J. N. TATTERSALL.

Assistant Professors: CHULSOON KHANG, W. E. WHITELAW.

Instructors: F. J. ALESSIO, M. H. BEST, A. B. CULVER, C. T. HAWORTH, R. B. SWANSON.

Assistants: D. S. ALLEN, B. BEN-ZION, D. C. BUNTING, P. E. CHURCH, S. P. DOLL, C. R. GRANT, D. A. HALL, J. G. HAWORTH, D. A. JOLLY, S. R. KEIL, G. J. LANDRY, E. F. MAERTENS, L. E. NOYD, J. A. OTTERBEIN, W. E. PETERS, D. R. SCHLOW, G. H. SMITH, C. M. STROH.

UNDERGRADUATE COURSES IN ECONOMICS are designed primarily to provide a broad knowledge of the field as a part of the program of liberal education offered by the College of Liberal Arts. They are also designed to give a substantial foundation in economics to students interested in (1) professional graduate training in economics, (2) professional careers in business, law, and government, and (3) secondary-school teaching.

Major Requirements. The following courses are required for an undergraduate major in economics:

Lower Division. Principles of Economics (Ec 201, 202, 203); 12 term hours of work in mathematics chosen from Mth 104, 105, 106, 200, 201, 202, 203, 204, 205, 206 (this requirement may not be satisfied with advanced placement credit for Mth 104, 105, 106); 6 term hours of work in statistics. The statistics requirement may be satisfied with Introduction to Business Statistics (BS 232), Elementary Inference in Business Statistics (BS 333) or Elements of Statistical Methods (Mth 425, 426).

Upper Division. Economic Theory (Ec 375, 376, 377). In addition, majors must complete 27 term hours of work in upper-division courses in economics, at least 18 of which must be in year sequences. (Ec 318, Ec 319, Ec 320 is not considered a year sequence.)

Suggested programs of study for economics majors planning to attend graduate school or to enter careers in business, law, government, or secondary-school teaching may be obtained from the Department of Economics.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in economics must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in economics required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

* On leave of absence, 1967-68.

† On sabbatical leave, 1967-68.

For further information, the student should consult the member of the economics faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Work in Economics. The Department of Economics offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. For the general requirements see GRADUATE SCHOOL, pages 113 ff.

A candidate for the Ph.D. degree in economics must complete a core of required courses and a written examination in economic theory (normally after the completion of the first full year of graduate work). He then specializes in three fields selected for concentrated study, one of which may be outside the Department of Economics, and must pass a written comprehensive examination in each field. All candidates for graduate degrees must have a basic knowledge of statistics.

LOWER-DIVISION COURSES

Ec 201, 202, 203. **Principles of Economics.** 3 hours each term.

Principles that underlie production, exchange, distribution, etc. Special section for Honors College students. Smith, Wattles.

UPPER-DIVISION COURSES

Ec 318. **Money and Banking.** 3 hours fall.

Operations of commercial banks, the Federal Reserve System, and the Treasury that affect the United States monetary system.

Ec 319. **Taxation and Fiscal Policy.** 3 hours winter.

Principles and problems of government financing. Expenditures, revenues, debt, and financial administration. Grove.

Ec 320. **International Finance.** 3 hours spring.

The nature of foreign-exchange markets; techniques of international payments; exchange rates and their determination; problems of an international monetary standard; international banking facilities; economic aspects of major international organizations.

Ec 375, 376, 377. **Economic Theory.** 3 hours each term.

Systematic survey of the concepts and methods of current economic analysis. Includes work in the fields of price, distribution, income, and employment theory. Required of all majors. Prerequisite: Ec 201, 202, 203. Bierwag, Khang, Koplin.

Ec 401. **Research.** Hours to be arranged.

Ec 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ec 407. **Seminar.** (g) Hours to be arranged.

Ec 411, 412, 413. **Monetary and Banking Theory.** (G) 3 hours each term.

Analysis of the nature of money, effects of changes in the money supply, monetary controls used by the Federal Reserve System and the Treasury, international repercussions of domestic monetary policies, international banking agencies; critique of various monetary policies. Prerequisite: Ec 201, 202, 203. Siegel, Simpson, Goldstein.

Ec 414, 415, 416. **Regional Economics.** (G) 3 hours each term.

Economic analysis applied to regional problems, with emphasis on problems and techniques relevant to the Pacific Northwest economy. Fall: economics of land use and resource conservation; winter: theory of location of economic activities; regional social accounting, balance of payments, comparative cost studies; spring: application of analytical tools to study of regional specialization in the United States economy and to problems of regional growth and

stability; urban and metropolitan structure and problems. Prerequisite: Ec 201, 202, 203. Tattersall, Allen, Whitelaw.

Ec 417. Contemporary Economic Problems. (g) 3 hours fall.

Contemporary economic conditions and problems; analysis of economic policies and practices affecting such problems.

Ec 418. Economy of the Pacific Northwest. (g) 3 hours spring.

Historical development and present industrial structure of the Pacific Northwest economy. Analysis of recent income changes, locational factors influencing development of major industries, relations with other regions, impact of Federal and state government policy. Simpson, Tattersall.

Ec 429, 430, 431. Public Finance. (G) 3 hours each term.

Critical analysis of taxes as sources of public revenue, with emphasis on tax theories and incidence. Effects of expenditure, tax, and debt policies of government upon the total economy. Prerequisite: Ec 201, 202, 203. Grove, Whitelaw.

Ec 432, 433, 434. The Economics of Public Policy. (G) 3 hours each term.

Application of economic principles and techniques to public policy issues; function of the economist in the formulation and implementation of public policy. Case studies involving systematic treatment of economic issues.

Ec 440, 441, 442. International Economics. (G) 3 hours each term.

Theory of international trade; problems in balance-of-payments adjustments during critical periods; commercial policies of the more-important nations; international economic organizations in theory and practice. Prerequisite: Ec 201, 202, 203. Allen, Wattles, Goldstein.

Ec 444. Labor Economics. (G) 3 hours fall.

Economic analysis applied to the labor market, with particular emphasis on wage determination, the relation between wages and prices, and the relation between wages and employment. Prerequisite: Ec 201, 202, 203. Kleinsorge, Smith.

Ec 445. Organized Labor. (G) 3 hours winter.

Theories of the labor movement; history of the American labor movement; aims, methods, and policies of trade unions, conservative and radical; the impact of labor organizations on the American economy. Kleinsorge, Smith.

Ec 446. Labor Legislation. (G) 3 hours spring.

Analysis of labor legislation in the United States and of court decisions in leading labor cases; problems facing employee, employer, and public that call for regulation through public authority. Kleinsorge, Smith.

Ec 447, 448, 449. Collective Bargaining. (G) 2 hours each term.

Major techniques of negotiation; union and management policies; strikes and lockouts. Methods of settling labor disputes, including grievance procedures, conciliation, fact finding, and arbitration. Prerequisite: Ec 444 or consent of instructor. Kleinsorge.

Ec 450, 451, 452. Comparative Economic Systems. (g) 2 hours each term.

An analytical comparison of capitalism and other economic systems. Smith, Wattles.

Ec 454, 455, 456. Economic History of Modern Europe. (G) 3 hours each term.

The economic development and economic institutions of modern Europe. Fall: from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter: late eighteenth century to end of nineteenth century; spring: twentieth century. Lorwin.

Ec 460, 461, 462. Industrial Organization and Public Policy. (G) 3 hours each term.

First term: Business policies, market organization, methods of competition, and distributive relationships, with particular attention to large diversified industrial enterprises. Second term: The nature and application of the antitrust laws. Third term: Unsolved problems in the relations of government to busi-

ness; comparison of American and foreign policies. Either of first two terms may be taken separately—both are requisite for the third term. Edwards, Smith.

Ec 463. Economics of Regulated Industries. (G) 3 hours winter.

Analysis of economic characteristics of industries in which the decision-making process is regulated by government administration rather than by competition: a description and evaluation of administrative procedures employed. Industries covered include transportation and the production of electricity, natural gas, and crude oil. If taken together with Ec 460, 461, will be considered a part of a sequence. Smith.

Ec 464, 465, 466. Quantitative Economic Analysis. (G) 3 hours each term.

The use of mathematical techniques in economic analysis. Consumption and production theory, programming, input-output; general equilibrium; multiplier, accelerator, growth, and inventory models. Prerequisite: Ec 201, 202, 203; Mth 104, 105, 106 or equivalent. Khang, Simpson.

Ec 470, 471, 472. History of Economic Thought. (G) 3 hours each term.

The evolution of man's ideas about economic matters; the classical school and the development of modern economic thought. Campbell, Davis.

Ec 480, 481, 482. Mathematical Economics. (G) 3 hours each term.

Construction and fitting of mathematical models of economic life. Prerequisite: Mth 104, 105, 106; Ec 201, 202, 203. Simpson.

Ec 483, 484, 485. National Income and Business Cycles. (G) 3 hours each term.

Theory and practice of social accounting, index numbers, measure of business cycle stages, leading and lagging series, behavior of labor cost, productivity, and other economic measures of business fluctuations. Prerequisite: Ec 201, 202, 203. Simpson.

Ec 487, 488, 489. American Economic History. (G) 3 hours each term.

All phases of the economic development of the United States. Tattersall.

Ec 490, 491, 492. Development of Industrial Economies. (G) 3 hours each term.

Comparative study of economic growth in the advanced industrial nations: North America, Western Europe, Japan, U.S.S.R. Analysis of differential national and regional growth rates; sources of economic growth; structural characteristics of developing economies; problems in measurement of long-term growth trends. Prerequisite: Ec 201, 202, 203. Tattersall.

GRADUATE COURSES

***Ec 501. Research.** Hours to be arranged.

***Ec 503. Thesis.** Hours to be arranged.

Ec 505. Reading and Conference. Hours to be arranged.

Ec 507. Seminar. Hours to be arranged.

Econometrics. Bierwag, Khang.
Economic History. Tattersall, Allen.
Industrial Organization and Control. Edwards, Smith.
History of Economic Thought. Campbell, Koplin.
Labor Economics. Kleinsorge.
International Economics. Mikesell, Wattles, Goldstein.
Money and Credit. Siegel.
Mathematical Economics. Simpson, Khang.
Public Finance. Grove.

Ec 514, 515, 516. Regional Economic Analysis. 3 hours each term.

Analysis of the structure of economic regions, theories of regional and inter-regional relations, location of economic activity, central place theory and land and natural-resource use patterns, techniques of analysis, empirical studies, and regional policies. Allen, Tattersall, Whitelaw.

* No-grade course.

Ec 524, 525, 526. Economic Growth and Development. 3 hours each term.

Economic, cultural, and political factors in economic development with special emphasis on low-income countries. Theory of economic development; case studies in economic growth; measures for accelerating development of poor countries; special problems of underdeveloped countries. Prerequisite: Ec 201, 202, 203; 12 term hours in upper-division social science. Mikesell.

Ec 558, 559, 560. Advanced Economic Theory. 3 hours each term.

Intensive examination of the basic principles of price and distribution theory and of income and employment analysis. Koplin, Siegel, Davis.

Ec 561, 562, 563. Income and Employment Theory. 3 hours each term.

Theory of output as a whole; theories of growth and fluctuations in the economic system, with emphasis on recent literature. Davis, Koplin.

Ec 575, 576, 577. Price and Distribution Theory. 3 hours each term.

Modern developments in the theory of price determination, income distribution, and economic welfare. Bierwag, Davis, Koplin.

English

Professors: KESTER SVENDSEN (department head), ROLAND BARTEL, F. G. BLACK, S. B. GREENFIELD, H. H. HOELTJE (emeritus), R. D. HORN, S. N. KARCHMER,* A. R. KITZHABER, W. F. MCNEIR, E. G. MOLL (emeritus), CARLISLE MOORE, J. C. SHERWOOD, W. F. G. THACHER (emeritus), A. K. WEATHERHEAD,† C. A. WEGELIN.

Associate Professors: R. C. ALBRECHT, R. C. BALL, W. E. CADBURY, ALICE H. ERNST (emeritus), THELMA GREENFIELD, J. A. HAISLIP, W. J. HANDY, J. A. HYNES,† S. R. MAVEETY, R. J. SALISBURY, W. C. STRANGE, O. M. WILLARD.†

Assistant Professors: LUCILE ALY, CONSTANCE BORDWELL, MERRIT CROSS, PASQUALE DI PASQUALE, JR., GLORIA JOHNSON, E. D. KITTOE, R. L. LACY, G. A. LOVE (director of composition), STODDARD MALARKEY, R. W. REID, G. W. ROCKETT, B. E. SABOL, IRMA SHERWOOD, CLARENCE SLOAT, HELEN SOEHREN, P. L. THORPE, J. B. TOELKEN.

Senior Instructor: RUTH JACKSON.

Instructors: A. K. AMOS, R. M. ATKINSON, L. H. BACKSTEDT, M. JOY BALLINGER, J. R. BARCHER, R. J. BERTHOLF, ELAINE BOWE, PAULA BROWN, M. K. BROWNING, W. M. BURKE, J. A. CARSTENS, R. M. CLIFTON, B. E. COMBS, D. D. DIAZ, R. J. DIXON, K. W. DOERRY, S. P. FINK, J. W. FOSTER, ROSALIE FOX,‡ J. W. FRALEY, L. H. FREEMAN, R. R. GARRIGUS, W. G. GOBER, MARJORIE GOSS, J. W. GRIFFITH, SUE HAMILTON, SUSANN HANDY, R. P. HASTINGS, T. J. HINES, W. J. KELLY, MIRIAM KISSLER, GLENNIE M. KITTOE, ANNABEL KITZHABER, G. J. KLEIN, J. E. KNIGHT, J. L. KURTZ, M. E. LEGRIS, W. H. LEYDEN, REGINA LUNDERGAN, G. H. LUNDY, J. O. MACINNIS, D. D. McWILLIAMS, N. D. MEINKE, E. J. MILOWICKI, M. D. PAYNE, J. G. PERRY, D. D. PETERSON, JOAN PIERSON, M. G. PORTER, ANN PRENGAMAN, H. M. ROBINSON, HELEN ROCKETT, EDITH P. RODE, D. S. ROSE,‡ LELAND RYKEN, I. M. SADOFF, LUCY SAWYER, JOHN SCALLY, JACQUELINE SNYDER, CAROLYN STARK, VIRGINIA STARR, C. D. STEVENS, KAY STEWART, D. J. TANNACITO, C. H. TAYLOR, SHARON THOMAS, INGRID WENDT, R. M. WIRFS, R. D. WYATT, AGNES YAMADA, JOAN YEATMAN.

Lecturer: PHYLLIS WHITTIER.

Assistants: KRISTINE ANDERSON, G. W. KROEKER, H. O. NICHOLS, MANORMA PANDIT, J. E. SANDERS, L. T. SPARKS, M. R. STAHELI, LAURELL SWAILS, G. L. WILSON, M. S. WILSON.

* On leave of absence 1967-68.

† On sabbatical leave 1967-68.

‡ Resigned Dec. 31, 1967.

THE DEPARTMENT OF ENGLISH offers instruction in English and American literature and in writing. Its lower-division courses are designed to supply the training essential for good writing, to serve as an introduction to humanistic studies, and to impart the fundamental knowledge requisite for a major in English. Its upper-division courses are designed to develop an intelligent and just appreciation of literature, to give some insight into the continuity of literature and the interrelation of literary movements, and to provide the opportunity for a well-rounded knowledge of the history of English and American literature and of the English language.

Major Requirements. The Department of English expects its majors to acquire, in addition to a knowledge of English literature, a general knowledge of philosophy and history and a reading knowledge of at least one foreign language. The general major requirements for the degree of Bachelor of Arts in the Department of English are as follows:

- (1) Satisfaction of the University language requirements for the B.A. degree.
- (2) English History (Hst 304, 305, 306), U. S. History (Hst 201, 202, 203), History of Western Civilization (Hst 101, 102, 103), *or* History (Honors College) (Hst 107, 108, 109).
- (3) Survey of English Literature (Eng 101, 102, 103), Introduction to Literature (Eng 104, 105, 106), World Literature (Eng 107, 108, 109), *or* Literature (Honors College) (AL 101, 102, 103); *and* Shakespeare (Eng 201, 202, 203).
- (4) A total of 36 hours in upper-division courses in the department, including 3 hours in the Middle Ages, 9 in other literature before 1800, and 9 in literature since 1800 (these hours need not be taken in period courses). Within the framework of these requirements, the student should construct, subject to his adviser's approval, a balanced and coherent program consistent with his personal interests and vocational needs. Programs centering on English literature, American literature, or creative writing are suggested, but other patterns are not excluded. Prospective high-school teachers must satisfy state certification requirements (see SCHOOL OF EDUCATION).

Secondary-School Teaching of English. For certification as a teacher of English in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

Completion of the requirements for a major in English at the University satisfies the state standards for undergraduate preparation and the requirements for recommendation by the University of Oregon, provided that the student includes in his program English Composition for Teachers (Wr 411), Literary Analysis for Teachers (Eng 488), Modern English Grammar (Eng 492), work in American literature, and at least one term of speech. The Department of English will approve enrollment in student teaching only if the student's work in English courses is of high quality.

Nonmajors who plan to teach English must complete a total of 42 term hours in English and speech, including the courses listed above and work in world literature.

For permanent certification, after a fifth year of preparation, the student must take work in literary criticism, additional work in English language and grammar, and literature courses to remedy deficiencies in his undergraduate preparation. It is recommended that students complete the interdisciplinary master's program for teachers during the fifth year of preparation.

For further information, the student should consult the member of the English faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Work. The Department of English offers graduate work in English literature, American literature, and linguistics, leading to the Master of Arts and Doctor of Philosophy degrees, and a graduate program in creative writing leading to the M.A. or Master of Fine Arts degree. A Ph.D. program in comparative literature, administered by a committee representing the Department of English; the Department of Classics, and Chinese and Japanese; the Department of German and Russian; and the Department of Romance Languages, offers opportunity for advanced study of several literatures in their original languages (see pages 161-162).

Except for candidates in creative writing, a thesis is not required in the M.A. program. All M.A. candidates take a written examination on a selected list of literary works.

The program leading to an M.F.A. in creative writing includes studies in English and American literature, in aesthetics, and in the history and criticism of art, music, and drama, and the production of a sustained piece of writing of high literary merit.

Literature

LOWER-DIVISION COURSES

*Eng 52. **Corrective Reading.** 1 hour any term.

Designed for students who have difficulties in reading at the college level. Methods for increasing speed and comprehension. Jackson.

†Eng 101, 102, 103. **Survey of English Literature.** 3 hours each term.

Study of the principal works of English literature based on reading selected to represent great writers, literary forms, and significant currents of thought. Provides both an introduction to literature and a background that will be useful in the study of other literatures and other fields of cultural history. **Fall:** Anglo-Saxon beginnings to the Renaissance; **winter:** Milton to Wordsworth; **spring:** Byron to present. Combs, Fink, Fox, Gober, Knight, Kurtz, Mundle, Perry, I. Sherwood, Whittier, Willard, Yeatman.

†Eng 104, 105, 106. **Introduction to Literature.** 3 hours each term.

Study of literature and the nature of literary experience through the reading of great works of prose and poetry, drawn from English and other literatures. Works representing the principal literary types are read in their entirety when possible, with emphasis on such elements as structure, style, characterization, imagery, and symbolism. Backstedt, Barchek, Bertholf, Bowe, Burke, Carstens, Diaz, Doerry, Foster, S. Greenfield, Goss, Hastings, Kelly, Malarkey, Payne, Porter, Robinson, Sawyer, Tannacito, Taylor, Wirfs.

†Eng 107, 108, 109. **World Literature.** 3 hours each term.

Study of the literary and cultural foundations of the Western world through the analysis of a selection of masterpieces of literature, ancient and modern, read in chronological order. The readings include continental, English, and American works. Ball, Browning, Clifton, S. Handy, Hines, McWilliams, Milowicki, H. Rockett.

Eng 201, 202, 203. **Shakespeare.** 3 hours each term.

Study of the important plays—comedies, histories, and tragedies. Required for majors. Black, Dixon, T. Greenfield, Horn, Johnson, McNeir, Maveety, Moll, Payne, Pierson, Reid, G. Rockett, I. Sherwood, J. Sherwood, Strange, Stevens, Svendsen.

Eng 253, 254, 255. **Survey of American Literature.** 3 hours each term.

American literature from its beginnings to the present day. Black, Cross, Legris, Porter.

* No-grade course.

† A student may register for only one of the three sequences: Eng 101, 102, 103; Eng 104, 105, 106; Eng 107, 108, 109.

UPPER-DIVISION COURSES

Eng 301. **Tragedy.** 3 hours.

A study of the nature of tragedy and of tragic expression in various literary forms. G. Rockett, Strange, Wegelin.

Eng 303. **Epic.** 3 hours.

The heroic spirit in Western European literature, with emphasis on English literature. Reid, J. C. Sherwood, Strange.

Eng 304. **Comedy.** 3 hours.

The comic view in both dramatic and nondramatic forms. Main emphasis on English masters, but with attention also to classical and continental writers. Principal theories of the comic and of comic literary forms and types. Horn, Strange.

Eng 305. **Satire.** 3 hours.

Satire, or criticism through ridicule, as a major type of literary expression. Examples from various literary forms—dramatic, narrative, and poetic—and from ancient and foreign literatures as well as English. Special emphasis on contemporary satire. J. Sherwood, Thorpe.

Eng 306, 307. **The Literature of the English Bible.** 3 hours each term.

Study of the literary qualities of the English Bible, with some reference to its influence on English and American literature. Maveety.

Eng 320, 321, 322. **English Novel.** 3 hours each term.

From Richardson and Fielding to the present. Black, Hynes.

Eng 323. **American Satire.** 3 hours.

Satire in American literature; its nature, development, and significant contributions to the interpretation of American life. Love.

Eng 391, 392, 393. **American Novel.** 3 hours each term.

Development of the American novel from its beginnings to the present. Albrecht, Cross, W. Handy.

Eng 394, 395, 396. **Twentieth-Century Literature.** 3 hours each term.

A critical survey of British, American, and some European literature from 1890 to the present; significant works of poetry, drama, and fiction studied in relation to intellectual and historical developments. Cadbury, S. Handy, W. Handy, Hynes, Moore, Sabol, Thorpe, Weatherhead.

Eng 403. **Thesis.** Hours to be arranged.Eng 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Eng 407. **Seminar.** (G) Hours to be arranged.Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.

The development of English dramatic forms from the beginnings to Sheridan. Horn, Strange.

Eng 414, 415, 416. **History of Literary Criticism.** (G) 3 hours each term.

Studies in the theory and practice of literary criticism from Plato and Aristotle to the present. J. C. Sherwood.

Eng 420, 421, 422. **Modern Drama.** (G) 3 hours each term.

Fall: growth of the modern theater in Europe from beginnings in romanticism through naturalism to symbolism and the poetic theater before 1914; winter: European and American drama between 1915-1940, the experimental theater and its effect on realism; spring: international developments in drama from 1941 to the present. Ball.

Eng 425. **Early English Literature.** (g) 3 hours.

The literature of the Middle Ages, in relation to the social and literary ideas of the period. Di Pasquale, S. Greenfield, Toelken.

- Eng 428. **Chaucer.** (g) 3 hours.
As much of Chaucer's work read as time permits. Di Pasquale, S. Greenfield, Malarkey, Toelken.
- Eng 430, 431, 432. **Literature of the Renaissance.** (G) 3 hours each term.
Fall: Renaissance thought; winter: Renaissance epic and prose narrative; spring: English lyric from Wyatt to Herrick. Thelma Greenfield, McNeir, Maveety.
- Eng 434. **Spenser.** (G) 3 hours.
McNeir.
- Eng 436. **Advanced Shakespeare.** (g) 3 hours each term.
Intensive study of selected plays. Not open to majors or to students who have had any term of Eng 201, 202, 203.
- Eng 440, 441, 442. **Seventeenth-Century Literature.** (G) 3 hours each term.
Poetry and prose from Jonson through the Restoration studied in relation to the trends of thought and feeling which characterize the century. Reid, G. Rockett, Svendsen.
- Eng 444. **Milton's Minor Poems and Prose.** (G) 3 hours.
The *Poems* of 1645 and the major prose works on liberty, education, and politics. Svendsen.
- Eng 445. **Milton's Major Poems.** (G) 3 hours.
Paradise Lost, *Paradise Regained*, and *Samson Agonistes*. Svendsen.
- Eng 450, 451, 452. **Eighteenth-Century Literature.** (G) 3 hours each term.
Fall: Restoration; winter: primarily Swift and Pope; spring: primarily Johnson and circle. Works are studied in relation to specific literary traditions. Horn, Thorpe.
- Eng 455. **Pope.** (G) 3 hours.
J. C. Sherwood.
- Eng 460, 461, 462. **The Romantic Poets.** (G) 3 hours each term.
Fall: Wordsworth and Coleridge; winter: Scott, Byron, and others; spring: Keats, Shelley, and others. Bartel, Strange.
- Eng 463, 464, 465. **The Later Nineteenth-Century Poets.** (G) 3 hours each term.
Fall: Tennyson and Browning; winter: Arnold, the pre-Raphaelites, Swinburne, and others; spring: Morris, Thomson, Thompson, Hopkins and others. Cadbury.
- Eng 470, 471, 472. **Nineteenth-Century Prose.** (G) 3 hours each term.
Main currents of thought as reflected in Carlyle, Mill, Newman, Ruskin, Huxley, Arnold, Pater. Moore.
- Eng 477, 478, 479. **Nineteenth-Century American Literature.** (G) 3 hours each term.
An intensive study of the American literary tradition. Fall: the beginnings of national literature; winter: transcendentalism and anti-transcendentalism; spring: realism and naturalism. Cross.
- Eng 481, 482, 483. **Major American Writers.** (G) 3 hours each term.
Intensive study of two or three major authors each term, such as Hawthorne, Emerson, Whitman, Melville, James, Twain, Dickinson, Frost, Eliot, Hemingway, Faulkner, Albrecht, W. Handy.
- Eng 487. **Yeats and Joyce.** (G) 3 hours.
The principal works of Yeats and Joyce, considered against the background of the Irish Renaissance. J. C. Sherwood.
- Eng 488. **Literary Analysis for Teachers.** (g) 3 hours.
For students interested in teaching high-school English. Training in comprehension and analysis of fiction, poetry, and drama from English and American literature. Bartel.

Eng 491. History of the English Language. (g) 3 hours.

A general view of modern English vocabulary, grammar, pronunciation, and spelling. Recommended for students preparing for the teaching of English in the secondary schools. Sloat, Willard.

Eng 492. Modern English Grammar. (g) 3 hours.

Comprehensive study of the grammar of modern English, for prospective teachers of English; examination of traditional, structural, and transformational theories. A. Kitzhaber, Sloat, Willard.

GRADUATE COURSES***Eng 501. Research.** Hours to be arranged.***Eng 503. Thesis.** Hours to be arranged.**Eng 505. Reading and Conference.** Hours to be arranged.**Eng 507. Seminar.** Hours to be arranged.**Eng 511, 512, 513. Old English.** 5 hours each term.

Linguistic study; selected readings in prose and poetry, including entire *Beowulf*. S. Greenfield.

Eng 514, 515, 516. Old Icelandic. 5 hours each term.

Linguistics; selected readings in the sagas, skaldic poetry, and the *Elder Edda*.

Eng 517. Middle English. 5 hours.

The English language from the time of the Norman Conquest to the early modern period; dialectal differences. Di Pasquale.

Eng 518. Chaucer's Troilus and Criseyde. 5 hours.

Detailed study of the poem, its sources, and its influence. Di Pasquale, S. Greenfield, Malarkey.

Eng 519. The Pearl Poet. 5 hours.

Detailed study of *Pearl* and *Gawain*; collateral readings in dream visions and romances. Di Pasquale, S. Greenfield, Malarkey.

Eng 520, 521, 522. History and Structure of the English Language. 5 hours each term.

Covers the same features of the language as Eng 491, but with a more detailed consideration of historical background and recent theories. Fall: meaning and vocabulary; winter: pronunciation and spelling; spring: grammar and usage. Sloat, Willard.

Eng 530, 531, 532. Shakespeare. 5 hours each term.

Fall: representative comedies of Shakespeare's early, middle, and late periods; winter: historical plays; spring: tragedies. Thelma Greenfield, McNeir.

Eng 540. Problems and Methods of Literary Study. 3 hours fall.

Bibliography and the methods of literary research as an introduction to graduate work. Required for graduate students in English. Cadbury.

Eng 585. Modern English Literary Criticism. 5 hours.

British and American critical theory and practice, 1900 to the present. Forms a year sequence with AL 586, 587. Weatherhead.

Eng 588, 589. Modern Poetry. 5 hours each term.

Fall: British poetry from Hopkins to the present; winter: American poetry from the imagists to the present. Weatherhead.

Eng 590, 591, 592. Modern Fiction. 5 hours each term.

Major tendencies in the fiction of the past hundred years. Fall: the rise and development of realism; winter: naturalism; spring: postnaturalism. Wegelin.

COURSES OFFERED ONLY IN SUMMER SESSIONS**Eng 423, 424. Types of Prose Fiction.** (G) 3 hours each term.**Eng 508. Workshop.** Hours to be arranged.

* No-grade course.

Writing

The Department of English offers required and elective courses in writing for all University students, to help them develop an ability to express themselves clearly in good English.

Undergraduate English majors may plan a program emphasizing creative writing; students planning to emphasize creative writing are advised to complete at least 6 term hours of Wr 221, 222, 223. The department also offers a graduate program in creative writing, leading to the M.A. or M.F.A. degree.

English Composition (Wr 121, 122, 123) is a freshman sequence required of all students in the University; each term's work must be taken in its sequential order. A student who demonstrates, through examination, that his writing ability meets the standard aimed at in English Composition may be excused from all or part of this required sequence. Students who do superior work in the first two terms of English Composition may be permitted to substitute Wr 224, Wr 226, or Wr 227 for Wr 123.

Students whose placement examination indicates inadequate preparation may not register for English Composition until they either (1) pass Corrective English (Wr 10), offered through the Division of Continuing Education of the State System of Higher Education, or (2) improve their writing proficiency by private study and achieve a satisfactory score on a second English placement examination. Students failing to pass this second examination must then pass Corrective English (Wr 10) before they may register for English Composition.

LOWER-DIVISION COURSES

Wr 97, 98. **English as a Second Language.** 3 hours each term.

Composition for students whose native language is not English. Admission to Wr 98 only on recommendation of instructor. Bordwell, Jackson.

Wr 121, 122, 123. **English Composition.** 3 hours any term.

The fundamentals of English composition; frequent written themes. Special attention to rhetorical effectiveness in papers. Love, staff.

Wr 221, 222, 223. **Introduction to Imaginative Writing.** 3 hours each term.

An introductory sequence for students interested in the techniques of writing and in the development of a critical appreciation of the art of writing in its varied forms. Fall: general consideration of style; winter and spring: criticism, essentials of the short story, fundamentals of playwriting and poetry writing. Prerequisite: consent of instructor. Brown, Karchmer, Lacy, Meinke, Salisbury, Wendt.

Wr 224. **Business and Professional Correspondence.** 3 hours.

Study of modern practices in business correspondence, primarily for students of business administration. Analysis and writing of the principal types of correspondence. Prerequisite: Wr 121, 122, 123. Kittoe.

Wr 226. **Expository Writing.** 3 hours.

Practice in various forms of expository writing. Soehren, staff.

Wr 227. **Scientific and Technical Writing.** 3 hours.

Practice in scientific and technical expository writing. Emphasis on the organization, form, and style of scientific, technical, and professional reports, articles, abstracts, summaries, memoranda, and correspondence. Kittoe.

Wr 231, 232. **Composition Tutorial.** 1 hour each term.

Tutorial instruction in English composition for students in the Honors College. Staff.

UPPER-DIVISION COURSES

Wr 316. **Advanced Expository Writing.** 3 hours.

Soehren.

Wr 321, 322, 323. Play Writing. 3 hours each term.

Creative experiment in the writing of plays, with incidental study of models. Analysis and discussion of student work. Prerequisite: consent of instructor. Haislip, Karchmer.

Wr 324, 325, 326. Short-Story Writing. 3 hours each term.

For students interested in creative writing or in professional writing for magazines. Prerequisite: consent of instructor. Karchmer, Lacy, Sabol, Salisbury.

Wr 341, 342, 343. Poetry Writing. 3 hours each term.

Verse writing; study of various verse forms as media of expression. Analysis of class work. Prerequisite: consent of instructor. Salisbury.

Wr 404. Writing and Conference. Hours to be arranged.**Wr 430, 431, 432. Senior Creative Writing.** 3 hours each term.

An advanced sequence in short story, poetry, and playwriting for seniors. Prerequisite: consent of instructor and nine hours of creative writing at 300 or 400 level. Haislip, Karchmer, Salisbury.

Wr 451, 452, 453. Projects in Writing. 3 hours each term.

For students who desire advanced instruction and practice in writing short stories, novels, television dramas, nonfiction, etc. Prerequisite: consent of instructor. Karchmer, Salisbury.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**Wr 411. English Composition for Teachers.** (g) 3 hours.

For students planning to teach English in high school. Practice in writing and a review of the rules of composition. Recommended for satisfaction of the high-school teaching requirement in English. Aly, Freeman, Kitzhaber, Love.

Wr 420, 421, 422. Novel Writing. (G) 3 hours each term.

Designed to provide apprentice training in writing of novels, and to develop a critical grasp of fiction problems. Sustained work on a writing project continued through the year. Individual assigned readings. Prerequisite: consent of instructor. Lacy.

Sp 464, 465, 466. History of the Theater. (G) 3 hours each term.

For description, see page 254. Cutler, DeChaine.

Wr 494. Theory of Fiction Writing. (G) 3 hours.

Introduction to literary theory and its application to imaginative writing. Designed for M.A. and M.F.A. candidates in writing, but open to others. Haislip, Karchmer, Salisbury.

GRADUATE COURSES***Wr 503. Thesis.** Hours to be arranged.**Wr 504. Writing and Conference.** Hours to be arranged.**Wr 530, 531, 532. Graduate Creative Writing.** 3 hours each term.

A graduate level sequence for M.A. and M.F.A. candidates interested in forms other than the novel: short story, poetry, playwriting. Prerequisites: admission to the M.A. or the M.F.A. program in creative writing and consent of the instructor. Haislip, Karchmer, Salisbury.

Sp 511. Eighteenth-Century Rhetorical Theory. 3 hours.

For description, see page 248.

Sp 551, 552, 553. Theory of Dramatic Production. 3 hours each term.

For description, see page 254. Robinson.

COURSE OFFERED ONLY IN EXTENSION**Wr 10. Corrective English.** No credit.

* No-grade course.

General Arts and Letters

THE CURRICULUM IN GENERAL ARTS AND LETTERS is designed for students who wish to build a program of general studies around a core of literature. The work of the first two years serves as an introduction to the main aspects of Western culture. In the last two years the more intensive study of the history of ideas, of literary movements, and of art forms serves to interpret modern trends in civilization.

The curriculum is administered by a committee. Dr. Frederick M. Combellack, professor of Greek literature, is chairman of the committee and adviser of majors in general arts and letters.

The major in general arts and letters leads to the Bachelor of Arts degree. The following courses are required:

Lower Division. (1) Literature (Honors College) (AL 101, 102, 103), *or* World Literature (Eng 107, 108, 109), *or* Survey of English Literature (Eng 101, 102, 103), *or* Introduction to Literature (Eng 104, 105, 106), *or* any sequence in foreign literature which has a prerequisite of two years (or equivalent) of foreign language in college. (2) Shakespeare (Eng 201, 202, 203), *or* Survey of the Visual Arts (ArH 201, 202, 203), *or* History of Western Art (ArH 204, 205, 206), *or* Introduction to Music and Its Literature (Mus 201, 202, 203). (3) At least one year of work in a foreign language beyond the first-year college level. (4) One of the following sequences in history: History of Western Civilization (Hst 101, 202, 103); History (Honors College) (Hst 107, 108, 109); English History (Hst 304, 305, 306).

Upper Division. (1) Literature of the Ancient World (AL 304, 305, 306). (2) Dante and His Times (AL 477, 478, 479). (3) One of the following sequences in philosophy: History of Philosophy (Phl 301, 302, 303); Philosophy in Literature (Phl 431, 432). (4) History of Literary Criticism (Eng 414, 415, 416) *or* Aesthetics (Phl 441, 442, 443).

In addition the student must complete four upper-division year sequences, each totaling at least 6 term hours, chosen from the departments of the College of Liberal Arts that offer majors; however, two of the sequences may be chosen from sequences in the history of art and music. If a required course is not offered in the student's senior year, he may, with the consent of the adviser, substitute another upper-division sequence in the same general field of study.

The student's program of study should form an integrated whole. The electives should support the objectives of this program.

Honors. See HONORS COLLEGE, pages 130 ff.

General Science

THE CURRICULUM IN GENERAL SCIENCE is intended for students who wish to build a program of cultural studies around a central interest in science as an aspect of civilization, for students preparing for professional careers in science (such as medical research) for whom a departmental science major may be too narrow and highly specialized, and for prospective science teachers. The standard three-year premedical or predental curriculum, followed by a year of work in a medical school or two years of work in a dental school, meets all of the requirements for the bachelor's degree in general science.

The general science major leads to the Bachelor of Arts or Bachelor of Science degree. The special requirements are: (1) Four one-year sequences, one in each of four sciences, selected from Bi 101, 102, 203, or Bi 104, 105, 106 (three terms chosen from Bi 301, 302, 303 and Bi 304, 305, 306 may be substituted),

Ch 104, 105, 106 or Ch 204, 205, 206 with laboratory, Geol 101, 102, 103, mathematics courses numbered 100-120 or 200-210, and Ph 201, 202, 203 with laboratory; (2) a minimum of 24 additional upper-division hours in the sciences in which one-year sequences have been taken, including not less than 9 term hours in each of two sciences. The four one-year sequences and the 24 upper-division hours must be taken on a graded basis.

For interdepartmental courses in general science, see pages 137-138.

Honors. See HONORS COLLEGE, pages 130 ff.

Secondary-School Teaching of General Science. For certification as a teacher of general science in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

The University's major program in general science satisfies these requirements only if the four one-year sequences include one each in biology, chemistry, and physics. For further information, the student should consult the adviser of general science majors.

General Social Science

THE PROGRAM IN GENERAL SOCIAL SCIENCE includes a series of courses of broad interdepartmental scope and a major curriculum in general social science leading to the bachelor's degree.

The curriculum in general social science is designed for students who wish broad cultural training, and for prospective teachers for whom a departmental major may be too highly specialized. In addition to satisfying the general University requirements, students following this program must take a minimum of 72 hours in social science courses. This work must include four lower-division year sequences, one in each of four of the following fields: anthropology, economics, geography, history, philosophy, political science, psychology, religion, sociology. Introduction to the Social Sciences (Honors College) (SSc 201, 202, 203) may be substituted for any one of the four required sequences. The upper-division work must include two one-year sequences (not less than 18 hours) in one social science department, and one one-year sequence (not less than 9 hours) in each of two other social science departments.

For interdepartmental courses in general social science, see page 138.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in general social science must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) 36 term hours of work in one field; (2) 18 term hours in history (including one upper-division sequence); (3) a 9-hour sequence in each of two additional fields; (4) at least one course in a fifth field. If history is chosen for the 36-hour concentration, the student must complete 18 hours in one of the two additional fields (3, above), including 9 hours in upper-division courses.

For further information, the student should consult the adviser of general social science majors.

Honors. See HONORS COLLEGE, pages 130 ff.

Geography

Professors: C. P. PATTON (department head), S. N. DICKEN,[†] E. T. PRICE.

Associate Professors: G. L. DAVIES, C. L. JOHANNESSEN, G. E. MARTIN, E. G. SMITH, A. W. URQUHART.*

Assistant Professor: W. LOY.

Assistants: W. CROWLEY, M. S. DROUBAY, A. H. GREENBERG, R. T. RICHARDSON, G. E. BROCK, T. BURNS, D. MORAN, L. ROWNTREE, L. FORD, A. MILLET.

THE DEPARTMENT OF GEOGRAPHY serves: (1) professional major students; (2) nonprofessional major students who wish to build a broad cultural education around a central interest in geography; and (3) students majoring in other fields who wish some acquaintance with the contribution of geography to the understanding of the world and its problems.

The department offers work for major students in four fields of specialization: (1) cultural geography, including economic, urban, and population geography; (2) physical geography, including climatology and geomorphology; (3) regional geography; and (4) techniques and methodology, including cartography, the interpretation of aerial photographs, and field geography.

Major Curriculum in Geography. A total of 45 term hours in geography courses, including 36 hours in upper-division courses, is required for a major in geography. It is recommended that the student limit his major work to approximately 54 term hours and elect work in such related fields as anthropology, biology, economics, geology, history, planning, political science, and sociology.

The student's work in geography must include a minimum of 9 term hours in each of the following four groups: (1) physical geography—Geog 105, Geog 481, 482, 483; (2) cultural geography—Geog 107, Geog 433, Geog 434, Geog 435, Geog 491, 492, 493; (3) regional geography—Geog 106, Geog 201, 202, 203, Geog 301, Geog 302, 303, Geog 451, 452, 453, Geog 461, 462, 463, Geog 471, 472, 473; (4) geographic techniques—Geog 407, Geog 421, 422, 423, Geog 484, Geog 485, 486.

For the B.S. degree, the student must complete 21 hours of additional work in science, including a 9-hour upper-division sequence requiring a prerequisite.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in geography must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in geography required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the geography faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. The department offers graduate work leading to the M.A. and Ph.D. degrees. To qualify for the master's degree the student must com-

* On leave of absence 1967-68.

† On sabbatical leave, 1967-68.

plete successfully 45 term hours of graduate work, of which 36 hours must be in the field of geography. All master's candidates must complete the following courses or their equivalent: Geog 421, 422, 423; Geog 481, 482, 483; Geog 484; Geog 485, 486; Geog 491, 492, 493. Nine term hours in seminars (Geog 507), including work in both physical and cultural geography, are required for candidates for the M.A. degree. For general requirements for graduate degrees see pages 117 ff.

LOWER-DIVISION COURSES

Geog 105, 106, 107. **Introductory Geography.** 3 hours each term.

A general introduction to the field of geography, in sequence as follows: Geog 105, physical geography; Geog 106, regional survey of the world; Geog 107, cultural geography.

Geog 201, 202, 203. **World Regional Geography.** 3 hours each term.

Physical, political, and regional economic geography. Fall: Europe; winter: Latin America; spring: Asia.

UPPER-DIVISION COURSES

Geog 301. **Geography of Oregon.** 3 hours fall.

Physical and cultural geography of Oregon. Dicken.

Geog 302, 303. **Geography of North America.** 3 hours each term, winter and spring.

Physical and cultural geography of the North American continent north of Mexico. Winter: western United States and western Canada; spring: eastern United States and eastern Canada. Dicken.

Geog 401. **Research.** Hours to be arranged.

Geog 405. **Reading and Conference.** Hours to be arranged.

Geog 407. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Geog 421, 422, 423. **Geographic Field Methods.** (G) 2 hours each term.

Research techniques in geography applied to special areas and problems. First term: introduction to tools and techniques of geographic field investigation; second term: research design, use of air photographs, maps, and other documents; third term: data gathering and analysis, report writing. Prerequisite: 9 hours of geography. Johannessen, Martin, Price.

Geog 433. **Political Geography.** (G) 3 hours.

Impact of political institutions upon the landscape; resources and political decisions; relation of formal and informal groups to political areas.

Geog 434. **Economic Geography.** (G) 3 hours.

Location factors in primary and secondary industries, and the distribution of these industries over the earth. Prerequisite: 6 hours in lower-division geography courses or consent of the instructor.

Geog 435, 436. **Urban Geography.** (G) 3 hours each term.

World distribution of great cities; urban patterns, forms, and functions; systems of urban land classification; forces affecting urban land use; geographic aspects of city planning. Prerequisite: 6 hours in lower-division geography courses or consent of instructor.

Geog 451. **Eastern and Southeast Asia.** (G) 3 hours.

Geog 452. **Southwestern Asia.** (G) 3 hours.

Geog 453. **Africa.** (G) 3 hours.

Physical and cultural processes that have shaped the landscapes of the Afro-Asian world.

Geog 461. **Andean America.** (G) 3 hours.

Geog 462. **Brazil and Argentina.** (G) 3 hours.

Geog 463. **Middle America.** (G) 3 hours.

Physical and cultural processes that have shaped the landscapes of Latin America.

Geog 471. **Atlantic and Mediterranean Europe.** (G) 3 hours.

Geog 472. **Central and Eastern Europe.** (G) 3 hours.

Geog 473. **Soviet Union.** (G) 3 hours.

Physical and cultural processes that have shaped the landscapes of Europe and the Soviet Union.

Geog 481, 482, 483. **Physical Geography.** (G) 5 hours each term, fall and winter; 3 hours spring.

Systematic study of the elements of the physical landscape. Fall: geomorphology; winter: climatology; spring: biogeography. Prerequisite: 9 hours of geography. Urquhart, Patton, Johannessen.

Geog 484. **Interpretation of Aerial Photographs.** (G) 3 hours.

Introduction to the use and interpretation of map and air photographs. Dicken.

Geog 485, 486. **Cartography.** (G) 3 hours each term.

Study of maps; introduction to map projections; the map base; map content and design; map interpretation. Prerequisite: 9 hours of geography. Johannessen, Patton.

Geog 491, 492, 493. **Cultural Geography.** (G) 3 hours each term.

Systematic study of the elements of the cultural landscape; origin and spread of ways of living; treatment of culture by geographers. Prerequisite: 9 hours of geography.

GRADUATE COURSES

*Geog 501. **Research.** Hours to be arranged.

*Geog 502. **Supervised College Teaching.** Hours to be arranged.

*Geog 503. **Thesis.** Hours to be arranged.

Geog 505. **Reading and Conference.** Hours to be arranged.

Geog 507. **Seminar.** Hours to be arranged.

Geomorphology. Dicken, Urquhart.

Climatology. Patton.

Biogeography. Johannessen.

Urban Geography.

Rural Settlement. Martin, Price.

Historical Geography. Dicken.

Middle America. Johannessen.

Andean America. Martin.

Africa. Urquhart.

Europe. Patton.

Soviet Union.

Geog 555. **History of Geographic Thought.** 3 hours.

Development of concepts of the earth and of man's relation to it; ends and means of geographic study.

Geology

Professors: L. W. STAPLES (department head), E. M. BALDWIN.

Associate Professors: GORDON G. GOLES, M. A. KAYS, E. H. LUND, A. R. Mc-BIRNEY, D. F. WEILL.

Assistant Professors: G. T. BENSON, SAM BOGGS, JR., WM. N. ORR.

* No-grade course.

Associates: KEITH RANDLE, HOWEL WILLIAMS.

Research Assistant: R. F. FREEMAN.

Assistants: C. I. CARLSON, J. G. CHAMP, JR., J. H. CORNELL, C. R. DERKSEN, M. J. DRAKE, J. EHLEN, L. G. ELPHIC, T. D. FOUCH, C. J. HICKMAN, F. G. LISSNER, B. L. PETERSON, R. D. ROBERTSON, R. J. SCHMELA, H. R. SWEET.

THE DEPARTMENT OF GEOLOGY serves three classes of students: (1) professional major students; (2) nonprofessional major students who wish to build a broad cultural education around a central interest in geology; and (3) students majoring in other fields who wish some acquaintance with the contributions of geological studies to the understanding of the world and its problems.

High-school students planning to major in geology at the University are advised to include in their high-school course: algebra, plane geometry, trigonometry, geography, science (physics, chemistry, or general science).

Major Curriculum in Geology. The following courses are required for an undergraduate major in geology:

Lower Division. General Geology (Geol 101, 102, 103); Introductory College Mathematics (Mth 104, 105, 106); General Chemistry (Ch 104, 105, 106, Ch 107, 108, 109); General Physics (Ph 201, 202, 203, Ph 204, 205, 206).

Upper Division. Mineralogy (Geol 311, 312, 313); Introduction to Paleontology (Geol 331, 332); Principles of Stratigraphy (Geol 392); Field Methods (Geol 393); Field Geology (Geol 406); Seminar (Geol 407), one term; Economic Geology (Geol 422); Lithology (Geol 411) or Petrology and Petrography (Geol 414, 415, 416); Structural Geology (Geol 491).

Geophysics-Geochemistry Option. Undergraduate majors may elect an option in geophysics-geochemistry, in preparation for graduate work in this or other fields of quantitative geology. The requirements for this option differ from the requirements of the regular major program in geology in the following respects: (1) one year of calculus is required; (2) either Advanced General Physics (Ph 320, 321, 322) or Quantitative Analysis (Ch 320) is required; (3) Economic Geology is not required.

Paleontology Option. Undergraduate majors may elect an option in invertebrate paleontology. The requirements for this option differ from the requirements of the major curriculum in geology in the following respects: (1) Economic Geology is not required; (2) General Biology (Bi 101, 102, 103) is required, and Invertebrate Zoology (Bi 461, 462), offered at the Institute of Marine Biology, may be substituted for Field Geology; (3) an additional 12 term hours of work must be elected from: Comparative Anatomy (Bi 355), Principles of Ecology (Bi 471, 472, 473), Historical Biogeography (Bi 491, 492, 493), Micropaleontology (Geol 440).

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. The department offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. A satisfactory rating on a Graduate Record Examination and on a qualifying examination are required for admission to candidacy for a graduate degree. All candidates are required to write a thesis. Suggested minor fields are: chemistry, physics, biology, or mathematics.

Facilities. The Condon Museum of Geology contains extensive collections of rocks, minerals, and fossils; its resources are supplemented by working collections for classroom and laboratory use. The varied geological terrain of the state of Oregon offers an exceptionally interesting field laboratory. Field trips are con-

ducted during the regular academic year. Field camps in various parts of the state are operated during the summer months.

Center for Volcanology. The Department of Geology includes a Center for Volcanology; Dr. A. R. McBirney, associate professor of geology, is director. Research and graduate instruction are conducted in several fields dealing with the products and processes of volcanism. The state of Oregon possesses a variety of volcanic features, providing exceptional opportunities for study of volcanic rocks and structures.

LOWER-DIVISION COURSES

Geol 101, 102, 103. **General Geology.** 4 hours each term.

Earth materials, processes, and forms; formation of economic mineral deposits; the main events in earth history. Lectures, laboratory, and field trips.

Geol 291. **Rocks and Minerals.** 3 hours.

Common minerals and rocks; origin, lore, and properties of precious, semi-precious, and ornamental stones; economically important rocks and minerals. 2 lectures; 1 three-hour laboratory period.

Geol 292. **Elementary Areal Geology.** 3 hours.

A study of regional geology primarily for nonmajors; areal distribution of sedimentary, igneous, and metamorphic rocks in Oregon. Field studies of selected areas, with emphasis on the relationships between rock type, structure, and topography. 1 lecture; 6 hours field work. Prerequisite: Geol 101, 102, 103.

UPPER-DIVISION COURSES

Geol 301, 302, 303. **Geologic History of Life.** 3 hours each term.

Fall: origins and early history of life, as revealed by the fossil remains of animals and plants; winter: geologic history of vertebrates; spring: geologic history of the mammals. Intended for nonmajor juniors and seniors.

Geol 311, 312, 313. **Mineralogy.** 4 hours each term.

Descriptive and determinative mineralogy; geometric and X-ray crystallography; optical mineralogy. Prerequisite: Ch 104, 105, 106; Ch 108, 109; Geol 101, 102. Staples.

Geol 331, 332, 333. **Introduction to Paleontology.** 3 hours each term.

Structure and evolution of invertebrates and vertebrates, and their distribution in geologic time. Prerequisite: Geol 103. Orr, Baldwin.

Geol 352. **Geology of Oregon.** 3 hours.

Lectures, assigned reading, and field trips, to acquaint the student with some of the salient features of the geology of the state. Baldwin.

Geol 392. **Principles of Stratigraphy.** 3 hours.

Genesis and subsequent history of stratified rocks; sedimentation, induration, weathering; the methods of correlating such formations. Prerequisite: Geol 101, 102, 103. Baldwin.

Geol 393. **Field Methods.** 3 hours.

Elementary topographic mapping; use of field instruments; field mapping of selected areas. Prerequisite: Geol 101, 102, 103. Boggs.

Geol 401. **Research.** Hours to be arranged.

Geol 405. **Reading and Conference.** Hours to be arranged.

Geol 406. **Field Geology.** Hours to be arranged.

Prerequisite: Geol 393, HEc 250, consent of instructor. Staples.

Geol 407. **Seminar.** Hours to be arranged.

Current Geological Literature.

Classical Geological Literature.

Engineering Geology.

Geological Report Writing.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Geol 411. Lithology. (g) 3 hours.

The origin, occurrence, and classification of the principal rock types. Laboratory examination and classification of rocks in hand specimens. 2 lectures, 1 laboratory period. Prerequisite: Geol 312. Lund.

Geol 414, 415, 416. Petrology and Petrography. (G) 4 hours each term.

Origins, occurrences, and classifications of rocks. Laboratory work in both megascopic and microscopic examination of rocks. Prerequisite: Ph 201, 202, 203; Geol 311, 312, 313. Kays, Lund.

Geol 421, 422, 423. Economic Geology. (G) 3 hours each term.

The general principles of the formation of metallic and nonmetallic economic geologic deposits; principal economic deposits, domestic and foreign. 2 lectures; 1 laboratory period. Prerequisite: Geol 311, 312, 313. Kays, McBirney, Weill.

Geol 440. Micropaleontology. (G) 3 hours.

Survey of microfossil groups; stratigraphic distribution; methods of separation from matrices; classification. 1 lecture; 2 laboratory periods. Prerequisite: Geol 331, 332. Orr.

Geol 451. Pacific Coast Geology. (G) 3 hours.

The general geology of the west coast of the United States and Canada from Alaska to southern California; special problems of the region. Prerequisite: Geol 392; senior or graduate standing. Baldwin.

Geol 473. Photogeology. (G) 3 hours.

Geologic interpretation of stereographic pairs of vertical aerial photographs. 2 lectures, 1 three-hour laboratory period. Prerequisite: Geol 101, 102, 103. Benson.

Geol 491. Structural Geology. (G) 4 hours.

Origin, interpretation, and mapping of major and minor geologic structures. 3 lectures, 1 laboratory period. Prerequisite: Geol 101, 102. Benson.

Geol 493. Petroleum Geology. (G) 3 hours.

Origin and accumulation of petroleum, methods of locating oil and gas, organization of exploratory programs, current economic and political factors affecting petroleum industry. 3 lectures. Prerequisite: Geol 392, Geol 491. Bogs.

GRADUATE COURSES

Geol 501. Research.** Hours to be arranged.Geol 503. Thesis.** Hours to be arranged.**Geol 505. Reading and Conference.** Hours to be arranged.**Geol 506. Advanced Field Geology.** Hours to be arranged.**Geol 507. Seminar.** Hours to be arranged.

Regional geologic studies.

Geol 511, 512, 513. Advanced Microscopy and Instrumentation. 4 hours each term.

Microtechniques in connection with the petrographic microscope, goniometer, X-ray diffractometer, and spectroscopy; chemical microscopy; photomicrography. Prerequisite: Geol 313. Kays, Goles, McBirney.

Geol 514, 515, 516. Advanced Petrology and Petrography. 3 hours each term.

Advanced petrographic methods and study of topics related to the origin and genetic relations of igneous and metamorphic rocks; microscopic examination of rock suites selected for study of petrologic principles and problems. Prerequisite: Geol 414, 415, 416. McBirney, Kays.

* No-grade course.

Geol 520. Advanced Economic Geology. 3 hours.

Theories of the origin of mineral deposits; study of examples illustrating general principles. Student reports on selected types of deposits. Review of current literature. Prerequisite: Geol 421, 422, 423.

Geol 523. Advanced Regional Stratigraphy. 3 hours.

Stratigraphic framework of the United States and other countries. Prerequisite: Geol 392. Baldwin.

Geol 524. Advanced Sedimentation. 3 hours.

Genesis, transportation, and deposition of sediments; geologic processes involved in formation of sedimentary rocks. Prerequisite: Geol 392, Geol 414. Boggs.

Geol 525. Advanced Sedimentary Petrology. 3 hours.

Application of mechanical, optical, and other techniques to the interpretation of depositional and diagenetic history of sedimentary rocks. Prerequisite: Geol 524. Boggs.

Geol 531, 532, 533. Advanced Paleontology. 3 hours each term.

Fall: scope and nature of paleontologic literature, procedures in taxonomy, current paleontologic research; winter: history and development of evolution theories, mechanics of organic change, population dynamics, paleoecological studies and applications; spring: detailed study of selected fossil groups. Prerequisite: Geol 331, 332. Orr.

Geol 551. Advanced Physical Geology. 3 hours.

Comprehensive appraisal of earth materials and processes, based on the study of original sources in classical and current literature of geology.

Geol 561, 562, 563. Geochemistry and Geophysics. 3 hours each term.

Application of physico-chemical principles to geologic processes on and within the earth; special emphasis on thermodynamics and its application to geologic problems; methods of geophysics for the determination of the nature of the interior of the earth. Prerequisite: calculus and physical chemistry, or consent of instructor; physical chemistry may be taken concurrently. Weill.

Geol 591, 592, 593. Advanced Structural Geology. 3 hours each term.

Theories of the origin of geologic structures observed in deformed rocks. Comparative study and classification of structures; theoretical and experimental studies. Prerequisite: Geol 491. Benson.

COURSES OFFERED ONLY IN SUMMER SESSIONS**Geol 408. Workshop.** (g) Hours to be arranged.**Geol 455. Studies in Physical Geology.** (g) 3 hours.**Geol 456. Regional Geology of North America.** (g) 3 hours.

German and Russian

Professors: W. A. LEPPMANN (department head), E. P. KREMER (emeritus), R. A. NICHOLLS.

Associate Professors: J. F. BEEBE, EDWARD DILLER,* P. B. GONTRUM, W. L. HAHN, ASTRID M. WILLIAMS.

Assistant Professors: CAROL B. BEDWELL, ALBERT LEONG, J. R. MCWILLIAMS,† H. R. PLANT, JAMES RICE.

Instructors: KAREN M. BUHRMANN, HENRY CROES, OTMAR JONAS, PAUL JUSWIGG, ESTHER H. LESÉR, WILMA-RIA K. NELSON, HOWARD PURVIS, VERA SIMONIN, JEAN M. WOODS.

* On leave of absence 1967-68.

† On sabbatical leave 1967-68.

Assistants: R. O. BURKHART, MEREDITH DENNING, M. G. DRUISEN, G. A. FETZ, ROSMARY IMBERT, BETH E. MAVEETY, G. E. MOORE, W. M. PFLUG, J. R. REECE, JUDY L. TOVEND, ARMIN WISHARD, D. S. WOLFE.

THE DEPARTMENT OF GERMAN AND RUSSIAN offers an undergraduate program in both language and literature. The program is designed to enable the student to achieve proficiency in reading, writing, and reading the language, and to provide a solid grounding in the literature of the country.

Requirements for Bachelor's Degree in German. A total of 36 hours in the following courses is required of all candidates for the Bachelor of Arts degree in German: Survey of German Literature (GL 301, 302, 303); Intermediate Composition and Conversation (GL 334, 335, 336); Advanced German Composition and Conversation (GL 424, 425, 426); at least one of the following year sequences: German Literature of the Twentieth Century (GL 307, 308, 309); The Age of Goethe (GL 411, 412, 413); Nineteenth Century Novelle (GL 414, 415, 416).

Undergraduate students preparing for graduate work in German are advised to begin a second foreign language, and to take related courses in either English or other European literature or both, philosophy, and history.

Requirements for Bachelor's Degree in Russian. The Bachelor of Arts degree in Russian requires 45 hours beyond the second-year sequence (SL 101, 102, 103 or equivalent) and normally will include: Readings in Russian Literature (SL 201, 202, 203 or SL 311, 312, 313); Russian Composition and Conversation (SL 314, 315, 316); Introduction to Russian Literature (AL 331, 332, 333); History of Russia (Hst 447, 448, 449); three additional upper-division courses totaling nine hours in Russian literature or linguistics to be selected from the following: Advanced Readings in Russian Literature (SL 411, 412, 413), The Russian Novel (SL 431, 432, 433); Modern Russian Short Story (SL 421); Modern Russian Poetry (AL 422); Modern Russian Drama (AL 423); Dostoevsky (AL 424); Tolstoy (AL 425); History of Russian Language (SL 414, 415, 416); Seminars (SL 407); Old Russian Literature; Pushkin; Gogol; Turgenev; Chekhov; Soviet Russian Literature; Russian Folklore; Structure of Russian.

Secondary-School Teaching of Foreign Languages. For certification as a teacher of German or Russian in Oregon high schools, the Oregon State Department of Education requires (1) the completion of forty-five term hours of subject preparation; (2) the completion of Ed 315, Human Development, Ed 408, Methods (six hours), and Ed 416 or Ed 417, Practice Teaching; and (3) the recommendation of the institution at which the student completes his subject preparation.

The Department of German and Russian will approve enrollment for student teaching only those students whose course work in the language they plan to teach is of high quality, and who have attained reasonable oral and written control of that language.

For permanent certification, after a fifth year of preparation, the student must complete an additional fifteen term hours in linguistics, culture and civilization, and phonetics. The following courses are recommended: German, GL 340, 341, 342, phonetics; Russian, AL 340, 341, 342; SL 414, 415, 416; both languages, AL 450, 451.

It is recommended that, if possible, the student complete the five-year program for permanent certification before he begins teaching, and that, during the fifth year, he satisfy the requirements for the interdisciplinary master's degree in teaching. (See pages 118-119.)

For further information, the student should consult a member of the departmental Committee on Teacher Training:

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. The Department offers programs leading to the degrees of Master of Arts and Doctor of Philosophy in German, and Master of Arts in Russian. For the master's degree in German, work in German literature is offered, which may be supplemented by courses in Germanic Philology (Middle High German, History of the German Language, and others). The doctoral program may be centered on literature or on philology as the student prefers, but not on one to the exclusion of the other. Potential candidates should consult Roger A. Nicholls for information about institutional and departmental requirements.

Students preparing for graduate work in Russian are expected to take either French or German and to complete a balanced program of electives approved by the student's departmental adviser.

GERMAN

LOWER-DIVISION COURSES

GL 50, 51, 52. **First-Year German.** 4 hours each term.

Designed to provide a thorough grammatical foundation and an elementary reading knowledge of German, as well as an understanding of the spoken language. Diller, staff.

GL 53, 54. **First-Year German.** 6 hours each term, winter and spring.

A two-term sequence covering the work of GL 50, 51, 52. For students who wish to begin German in the winter term.

GL 101, 102, 103. **Second-Year German.** 4 hours each term.

Review of grammar and composition; reading of selections from representative authors; conversation. Special section for Honors College students. Bedwell, staff.

UPPER-DIVISION COURSES

GL 301, 302, 303. **Survey of German Literature.** 3 hours each term.

German literature from the Middle Ages to the present; readings from representative authors. One section conducted in German. Prerequisite: two years of college German. Gontrum, Williams.

GL 307, 308, 309. **German Literature of the Twentieth Century.** 3 hours each term.

Introduction to the prose, poetry, and drama of the modern period. Particular attention to literary trends (naturalism, neoromanticism, expressionism, post-world War II literature) and experimental forms of the period. Emphasis on representative authors including Hauptmann, Thomas Mann, Rilke, Hesse, Kafka, Brecht. Bedwell, Diller.

AL 314, 315, 316. **Introduction to Germanic Literature.** 3 hours each term.

For description, see page 136. Bedwell.

GL 320, 321, 322. **Scientific German.** 3 hours each term.

Intensive practice in grammar, followed by the reading of texts in the student's major field. Intended principally for graduate students. Nicholls.

GL 334, 335, 336. **German Composition and Conversation.** 3 hours each term.

Extensive practice in speaking and writing. Required of German majors. Conducted in German. Prerequisite: two years of college German. McWilliams, Plant.

GL 340, 341, 342. **German Culture and Civilization.** 3 hours each term.

Historical and political backgrounds of German literature and art. Prerequisite: reading knowledge of German. McWilliams.

GL 403. **Thesis.** Hours to be arranged.

GL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

GL 407. **Seminar.** (g) Hours to be arranged.

GL 411, 412, 413. **The Age of Goethe.** (G) 3 hours each term.

Readings in the main dramatic works of Lessing, Schiller, Kleist, and Goethe; Goethe's lyric poetry and selections from his prose. The spring term is devoted to the study of *Faust*. Prerequisite: Survey of German Literature. Leppmann.

GL 414, 415, 416. **The Nineteenth-Century German Novelle.** (G) 3 hours each term.

The theory and history of the *Novelle*. Readings of selected *Novellen* from Kleist to Fontane. Hahn.

GL 424, 425, 526. **Advanced German Composition and Conversation.** (G) 3 hours each term.

Systematic review of grammar; historical survey of the German language; translation of modern literary texts into German; writing of original themes. Conducted in German. Normally required of German majors. Leppmann, Hahn.

GL 427, 428, 429. **German Romanticism.** (G) 3 hours each term.

Readings in the works of Tieck, F. Schlegel, Novalis, Hoffmann, Mörike, and Eichendorff. Special emphasis on the romantics' contributions to literary criticism, to music, and to the study of the German past. Prerequisite: Survey of German Literature. Hahn.

GL 430, 431, 432. **The German Lyric.** (G) 3 hours each term.

Study of German lyric poetry from the Middle Ages to the present, with readings from all major authors. Special emphasis on the *Lied* and the ballad and on the contemporary lyric poetry of George, Hofmannsthal, Rilke. Gontrum.

GRADUATE COURSES

*GL 503. **Thesis.** Hours to be arranged.

GL 505. **Reading and Conference.** Hours to be arranged.

GL 507. **Seminar.** Hours to be arranged.

Humanism and the Reformation.
The German Baroque.
History of the German Language.

GL 514, 515, 516. **Middle High German.** 3 hours each term.

Literary and linguistic study of representative texts: the *Nibelungenlied*, *Minnesang*, popular and courtly epics and lyrics, didactic works. Plant.

GL 524, 525, 526. **German Literature 1500-1750.** 3 hours each term.

The impact of Luther on German literature; seventeenth-century German literature; the German Enlightenment, and its relation to the Enlightenment in England and France. Gontrum.

GL 527, 528, 529. **Goethe.** 3 hours each term.

Comprehensive examination of Goethe's works, including an intensive study of *Faust*, and Goethe's aesthetic and critical views. Nicholls.

GL 530, 531, 532. **Germanic Philology.** 3 hours each term.

Introduction to Gothic; comparative Gothic and Old High German grammar; Old High German literature. Plant.

GL 533, 534, 535. **History of the German Language.** 3 hours each term.

Phonological, morphological, semantic, and syntactic development of German from the oldest records to the present; dialects and dialect geography; loan words from other languages; religious, philosophical, scientific, and other specialized vocabularies. Plant.

* No-grade course.

GL 536. **Lessing.** 3 hours.

Detailed study of Lessing's dramas, his theoretical and philosophical writings, and his contribution to German classicism.

GL 537. **Sturm und Drang.** 3 hours.

The dramatic works of the Storm and Stress writers, and their contribution to a new understanding of literature.

GL 538. **Schiller.** 3 hours.

An intensive study of Schiller as a dramatist and poet, with particular consideration also of his important critical essays.

GL 540, 541, 542. **German Drama of the Nineteenth Century.** 3 hours each term.

Analysis of the dramas of Kleist, Büchner, Grabbe, Grillparzer, and Hebbel; special emphasis on dramatic technique and on the individual contributions of these writers to the genre. Fall: Kleist; winter: Grillparzer; spring: Büchner, Grabbe, Hebbel. Nicholls.

GL 543, 544, 545. **Contemporary German Lyric.** 3 hours each term.

Fall: Rilke; winter: George and Hofmannsthal; spring: Benn, Trakl, and contemporaries. Detailed and intensive study of these writers' poetry in terms of themes, form, and imagery.

GL 546, 547, 548. **Modern German Novel.** 3 hours each term.

Fall: Thomas Mann; winter: Hermann Hesse; spring: Kafka and Musil. Detailed study of these writers or of other novelists of comparable stature, with emphasis on the nature of the genre and its gradual transformation as well as on narrative style and technique.

GL 550, 551, 552. **Modern German Drama.** 3 hours each term.

Fall: Gerhart Hauptmann, Arthur Schnitzler; winter, Wedekind and the Expressionists; spring: Brecht, Dürrenmatt, Frisch. Intensive study of the dramatic works of these writers, particularly in terms of new dramatic techniques. Gontrom.

GL 555, 556, 557. **German Novel of the Nineteenth Century.** 3 hours each term.

Detailed study of the novels of Jean Paul, Mörike, Immermann, Stifter, Keller, Raabe and Fontane. Emphasis on the *Bildungs* or *Erziehungsroman* through treatment of narrative structure and technique. Hahn.

RUSSIAN

LOWER-DIVISION COURSES

SL 50, 51, 52. **First-Year Russian.** 4 hours each term.

Elementary Russian grammar, reading, conversation, and composition. Beebe, Rice, V. Simonin.

SL 60, 61, 62. **Intensive Russian.** 6 hours each term.

Intensive study of Russian grammar, reading, conversation, and composition. Covers in two terms the material of SL 50, 51, 52.

SL 101, 102, 103. **Second-Year Russian.** 4 hours each term.

Intermediate Russian grammar, reading, conversation, and composition. Study of representative literary works. Beebe, Juswigg, Rice.

SL 201, 202, 203. **Readings in Russian Literature.** 3 hours each term.

Extensive study of modern Russian literary texts. Prerequisite: SL 101, 102, 103 or equivalent. Same as SL 311, 312, 313, but may not be counted for upper-division credit. Leong.

UPPER-DIVISION COURSES

SL 311, 312, 313. **Readings in Russian Literature.** 3 hours each term.

For description, see SL 201, 202, 203. Not open to students who have completed that sequence. Leong.

- SL 314, 315, 316. **Russian Composition and Conversation.** 3 hours each term.
Extensive practice in speaking, writing, and comprehension. Conducted in Russian. Prerequisite: SL 101, 102, 103 or equivalent. Juswigg.
- SL 331, 332, 333. **Russian Pronunciation and Phonetics.** 2 hours each term.
Study of the fundamentals of Russian pronunciation, with attention to each student's difficulties. Prerequisite: two years of college Russian or equivalent.
- AL 331, 332, 333. **Introduction to Russian Literature.** 3 hours each term.
Russian literature from origins to 1917, with special emphasis on Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, Chekhov, and others. All readings in English, but Russian majors are expected to do selected readings in the original. Leong.
- AL 340, 341, 342. **Russian Culture and Civilization.** 3 hours each term.
Main currents of Russian intellectual, literary, and artistic life.
- SL 403. **Thesis.** Hours to be arranged.
- SL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- SL 407. **Seminar.** (g) Hours to be arranged.
Pushkin.
Gogol.
Dostoevsky.
Tolstoy.
Turgenev.
Chekhov.
Soviet Russian Literature.
Russian Folklore.
Structure of Russian.
- SL 411, 412, 413. **Advanced Readings in Russian Literature.** (g) 3 hours each term.
Stylistic analysis of Russian literary texts. Prerequisite: SL 311, 312, 313 or equivalent.
- SL 414, 415, 416. **History of Russian Language.** (g) 3 hours each term.
Fall: Old Church Slavonic; winter and spring: History of Russian Literary language. Prerequisite: Three years college Russian or equivalent. Beebe.
- AL 421. **Modern Russian Short Story.** (g) 3 hours.
Development of Russian short story. All readings in English, but Russian majors are expected to do selected readings in the original. Rice.
- AL 422. **Modern Russian Poetry.** (g) 3 hours.
Detailed study of Russian symbolism, acmeism, and futurism. All readings in English, but Russian majors are expected to do selected readings in the original. Leong.
- AL 423. **Modern Russian Drama.** (g) 3 hours.
Evolution of Russian drama. All readings in English, but Russian majors are expected to do selected readings in the original. Leong or Rice.
- AL 424. **Dostoevsky.** (g) 3 hours.
Dostoevsky's intellectual and artistic development; context and structure of *The Double*, *Notes From the Underground*, *Crime and Punishment*, *The Idiot*, *The Devils*, *The Brothers Karamazov*, and other works. All readings in English, but Russian majors are expected to do selected readings in the original. Leong.
- AL 425. **Tolstoy.** (g) 3 hours.
Development and context of Tolstoy's art; analysis of *War and Peace*, *Anna Karenina*, representative short novels, stories, plays, and essays. All readings in English, but Russian majors are expected to do selected readings in the original. Leong.

SL 431, 432, 433. **The Russian Novel.** (g) 3 hours each term.

Stylistic analysis of advanced Russian literary texts. Prerequisite: SL 311, 312, 313 or equivalent. Leong, Rice.

SL 461, 462, 463. **Advanced Russian Composition and Conversation.** (g) 2 hours each term.

Extensive practice in conversation, composition, and comprehension. Conducted in Russian. Prerequisite: SL 314, 315, 316 or equivalent.

SCANDINAVIAN

LOWER-DIVISION COURSES

GL 60, 61, 62. **First-Year Norwegian.** 3 hours each term.

Designed to give a thorough grammatical foundation in idiomatic Norwegian, with emphasis on both the reading and the speaking of the language. Williams.

GL 70, 71, 72. **First-Year Swedish.** 3 hours each term.

Designed to give a thorough grammatical foundation in idiomatic Swedish, with emphasis on both the reading and the speaking of the language. Williams, Lesér.

GL 104, 105, 106. **Second-Year Norwegian.** 3 hours each term.

Review of grammar, composition, conversation; study of selections from representative authors. Williams.

GL 107, 108, 109. **Second-Year Swedish.** 3 hours each term.

Review of grammar, composition, conversation; study of selections from representative authors. Williams.

UPPER-DIVISION COURSES

AL 351, 352, 353. **Scandinavian Literature in Translation.** 3 hours each term.

For description, see page 137. Williams.

History

Professors: E. R. BINGHAM, QUIRINUS BREEN (emeritus), P. S. DULL,* T. P. GOVAN, V. R. LORWIN, EARL POMEROY,* K. W. PORTER, R. W. SMITH,* L. R. SORENSON, W. H. STEPHENSON.

Associate Professors: W. S. HANNA (department head), GUSTAVE ALEF, R. F. BIRN, P. S. HOLBO, S. A. PIERSON.

Assistant Professors: R. M. BERDAHL, T. A. BRADY, G. R. FALCONERI, R. A. KIMBALL, R. G. LANG, J. P. MADDEX, J. W. PERRIN, J. E. WOODHAM.

Instructors: R. S. DILL,† LINDA HUNTER.

Lecturer: LEON JANKELEVITCH.

Associate: MABEL E. McCLAIN (emeritus).

Assistants: ROBERTA BAILEY, J. R. BAKER, MARTHA BOBBITT, W. H. BRENNAN, H. W. BURMEISTER, R. E. BURTON, D. S. CHANDLER, M. C. CHOU, S. E. CONWAY, J. J. COOGAN, L. W. FENDALL, N. A. FERGUSON, R. C. FREY, JOCELYN GODOLPHIN, RUTH HERMAN, P. G. HUMMASTI, S. C. IMMER, S. W. INGE, W. A. JACOBS, C. M. JENSEN, C. R. JENSEN, D. A. JOHNSON, KATHERINE JORGENSEN, H. M. KANE, B. T. LEWIS, F. D. MAHAR, J. F. MERRITT, C. G. PALM, MARY G. PERSYN, W. G. ROBBINS, K. M. SEIBT, C. E. THOMASON, W. W. TOZER, H. S. TSAI, MARY UYEDA, R. W. WHITE.

THE DEPARTMENT OF HISTORY offers instruction in American, European, and East Asian history, and major programs designed for general education and in preparation for public school teaching and for graduate study and research.

* On sabbatical leave 1967-68.

† On leave of absence 1967-68.

Requirements for the Bachelor's Degree. For a bachelor's degree with a major in history, a student must complete a balanced program approved by his departmental adviser. Specific requirements are as follows:

- (1) Satisfaction of the University requirement for the B.A. degree.
- (2) Forty-two term hours in history courses, of which 24 must be upper-division, including at least 9 hours of 400-level courses (15 upper-division hours must be taken at the University of Oregon).
- (3) History of Western Civilization (Hst 101, 102, 103), *or* History (Honors College) (Hst 107, 108, 109), *or*, with consent of adviser, 15 hours of upper-division European history, including courses both before and after 1600.
- (4) A year sequence in United States history.
- (5) Not less than two terms (6 hours) of upper-division courses in each of two fields selected from the following: (a) Europe before 1600, (b) Europe after 1600, (c) United States, Far East, or Latin America.
- (6) At least one term of Seminar (Hst 407) or Colloquium (Hst 408).
- (7) A 2.25 grade-point average in history courses.

History majors should take work in allied fields that will contribute to a well-balanced liberal education. The department recommends work in foreign language and literature extending, if possible, beyond the second-year level and leading to a thorough reading knowledge of a language.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in history must complete a program selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 gpa or higher. The program must include work in history required for a major plus courses in the other fields listed. The program must also include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult a member of the history faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Work. The department offers graduate instruction leading to the degrees of Master of Arts and Doctor of Philosophy. For requirements for graduate degrees, see GRADUATE SCHOOL, pages 113 ff. A detailed statement of departmental requirements may be obtained in the department office.

LOWER-DIVISION COURSES

Hst 101, 102, 103. **History of Western Civilization.** 3 hours each term.

Origins and development of Western civilization from ancient times to the present. Alef, Birn, Dill, Brady, Lang, Berdahl, Kimball, Perrin, Sorenson.

Hst 107, 108, 109. **History (Honors College).** 3 hours each term.

Significant events, ideas, and institutions in the development of Western civilization. Alef, Birn, Dill Brady, Berdahl, Kimball, Lang, Perrin, Pierson.

Hst 201, 202, 203. **History of the United States.** 3 hours each term.

From colonial times to the present. Bingham, Govan, Holbo, L. Hunter, Maddex, Porter, Stephenson.

UPPER-DIVISION COURSES

- Hst 301, 302, 303. **Europe since 1789.** 3 hours each term.
Political, social, economic, and cultural trends from the French Revolution to the present. Fall: 1789 to 1870; winter: 1870 to 1918; spring: 1918 to the present. Pierson.
- Hst 304, 305, 306. **English History.** 3 hours each term.
A general survey, covering political, economic, social, intellectual, and religious developments. Lang, Smith.
- Hst 350, 351, 352. **Hispanic America.** 3 hours each term.
A survey of Hispanic America with emphasis on political and cultural history; the Spanish colonial period; the wars for independence and the early republican years; internal development of the modern states and inter-American relations. Holbo, Woodham.
- Hst 391, 392, 393. **Far East in Modern Times.** 3 hours each term.
Political, economic, and diplomatic history of China, Japan, and Korea, with some attention to Asiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Dull, Falconeri.
- Hst 403. **Thesis.** Hours to be arranged.
- Hst 405. **Reading and Conference.** Hours to be arranged.
- Hst 407. **Seminar.** Hours to be arranged.
Junior Honors Seminar.
Senior Seminar.
- Hst 408. **Senior Colloquium in American History.** 3 hours each term.
Study of significant historical writings from colonial times to the present, with emphasis on methods and interpretations. Prerequisite: consent of instructor. Stephenson.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Hst 411. **History of Greece.** (G) 3 hours fall.
Political, social, and cultural history of the Hellenic world from the Mycenaeans to Alexander the Great. Dill.
- Hst 412, 413. **History of Rome.** (G) 3 hours each term, winter and spring.
Winter: history of Rome from its earliest beginnings to the end of the Republic; spring: the period of the Empire. Dill.
- Hst 420. **Historical Method.** (G) 3 hours fall.
Introduction to methods of historical research and writing.
- Hst 421, 422, 423. **Middle Ages.** (G) 3 hours each term.
History of Europe from the decline of the Western Roman Empire to the Renaissance. Fall: to the Carolingians; winter: to 1100; spring: to 1300. Perrin.
- Hst 424, 425. **Early Modern Europe.** (G) 3 hours each term.
The seventeenth century (Hst 424) and the eighteenth century (Hst 425). Birn.
- Hst 430, 431. **Renaissance.** (G) 3 hours each term, fall and winter.
Fall: the Renaissance in Italy; winter: the northern Renaissance. Brady.
- Hst 432. **Reformation.** (G) 3 hours spring.
The Protestant and the Roman Catholic reforms of the sixteenth century. Brady.
- Hst 434, 435. **Western Institutions and Ideas.** (G) 4 hours each term.
Intensive study of selected ideas and institutions that have influenced the history of Western civilization. Prerequisite: a college-level introductory course in European history. Sorenson.

Hst 437, 438. History of Germany. (G) 3 hours each term.

First term: from the Treaty of Westphalia (1648) to the revolutions of 1848.
Second term: from 1848 to the development of post-World-War-II Germany.
Berdahl.

Hst 439, 440. Cultural and Intellectual History of Modern Europe. (G) 3 hours each term.

Major issues in the cultural and intellectual life of Europe since 1815. Concentration on the interaction between ontological inquiry, aesthetic expression, and social or political experience. Pierson.

Hst 441, 442, 443. History of France. (G) 3 hours each term.

Hst 441: Old Regime, revolutionary and Napoleonic era, nineteenth century to 1870; Hst 442: Third Republic, 1870-1940; Hst 443: since 1940. Lorwin.

Hst 444, 445. Twentieth-Century Europe. (G) 3 hours each term.

The revolutionary consequences of World War I for society, politics, and the economy; the new democratic governments and the challenge of Bolshevism, Fascism, and Nazism; World War II and its aftermath; the Soviet satellites; rebuilding the European economy.

Hst 447, 448, 449. History of Russia. (G) 3 hours each term.

Fall: the Kievan state and the emergence of Muscovy; winter: creation of the Russian Empire, political, social and economic developments; spring: revolutionary Russia, 1861 to the present. Alef, Kimball.

Hst 450. History of Spain. (G) 3 hours.

Institutional, social, and cultural history of Spain from 711 to the present, with emphasis on the periods from Alfonso X to Philip II and from Philip V to Franco. Woodham.

Hst 454, 455, 456. Economic History of Modern Europe. (G) 3 hours each term.

The economic development and economic institutions of modern Europe. Fall: from the beginning of the sixteenth century to the beginnings of the Industrial Revolution in Britain; winter: late eighteenth century to end of nineteenth century; spring: twentieth century. Lorwin.

Hst 457, 458, 459. The Era of American Sectional Conflict. (G) 3 hours each term.

The United States during the nineteenth century, focusing on the origins, events, and effects of the sectional conflict whose military phase was the Civil War. Fall: from Jefferson to Polk; winter: sectional crisis and civil war; spring: Reconstruction and the late nineteenth century. Maddex.

Hst 458. The Era of the Civil War. (G) 3 hours.

Intensive study of the critical decade before the Civil War and of the course of that conflict. Maddex.

Hst 459. The Era of Reconstruction. (G) 3 hours. Maddex.

Problems of the tragic era following the Civil War; continuing effects to the end of the nineteenth century. Maddex.

Hst 460, 461, 462. History of American Thought and Culture. (G) 3 hours each term.

Main currents of American intellectual and cultural life from colonial times to the present. Prerequisite: Hst 201, 202, 203 or consent of instructor. Bingham.

Hst 463. History of Canada. (G) 3 hours.

A survey of the growth of Canada from colony to nation, emphasizing the period after confederation. Smith.

Hst 464. History of Mexico. (G) 3 hours.

Political, social, economic and intellectual trends and problems from 1810 to the present. Woodham.

Hst 465. British Empire. (g) 3 hours.

History of the British Empire since 1815; colonial nationalism and the development of the Commonwealth. Smith.

Hst 466. Tudor England. (G) 3 hours.

The political, social, economic, and intellectual development of England through the reigns of the Tudor sovereigns, 1485-1603. Lang, Smith.

Hst 468. Victorian England. (G) 3 hours.

Social, political, economic, and intellectual history of England from 1815 to 1900. Smith.

Hst 469. Twentieth-Century England. (G) 3 hours.

Social, political, economic, and intellectual changes in Great Britain in the twentieth century. Smith.

Hst 470, 471. Social Factors in American History. (G) 3 hours each term.

Effect of the varied character of the population on American history and culture. First term: national and racial influences; second term: religious factors. Porter.

Hst 472. History of Brazil. (G) 3 hours.

Development of Brazil from the colonial period to the present; political, social, and economic trends, national characteristics, regional and racial diversities.

Hst 473, 474, 475. American Foreign Relations. (G) 3 hours each term.

The character and consequences of American foreign policies. Fall: from the Revolution to the Civil War; winter: to World War I; spring: through World War II. Segments are independent. Holbo.

Hst 476, 477. History of the West. (G) 3 hours each term.

The American frontier. First term: the early American frontier; second term: the Great Plains and the Far West. Porter, Pomeroy.

Hst 478. History of the Pacific Northwest. (G) 3 hours.

Detailed study of the building of civilization in the Pacific Northwest. Prerequisite: Hst 201, 202 or consent of instructor. Bingham, Porter.

Hst 479. Forces and Influences in American History. (G) 3 hours.

Geographic influences; influence of the frontier; inheritance and tradition; economic forces; nationalism; sectionalism; manifest destiny; democracy.

Hst 480, 481, 482. The United States in the Twentieth Century. (G) 3 hours each term.

Fall: to 1921; winter: 1921-41; spring: since 1941. Pomeroy.

Hst 484, 485, 486. Early History of the American People. (G) 3 hours each term.

From the discovery of America to 1789. Hanna.

Hst 487, 488, 489. American Economic History. (G) 3 hours each term.

The economic development of the United States.

Hst 491, 492, 493. The Early National Period in United States History. (G) 3 hours each term.

Political, social, and cultural themes in early American history.

Hst 494, 495, 496. History of China. (G) 3 hours each term.

Fall: from legendary times through the T'ang Dynasty (618-907); winter: from the Sung Dynasty (960-1276) to the "Second Treaty Settlement" of the Manchus in 1860; spring: 1860 to the present. Dull, Falconeri.

Hst 497, 498, 499. History of Japan. (G) 3 hours each term.

History of Japan, from its beginnings to the present. Dull, Falconeri.

GRADUATE COURSES

*Hst 501. **Research.** Hours to be arranged.

*Hst 502. **Supervised College Teaching.** Hours to be arranged.

*Hst 503. **Thesis.** Hours to be arranged.

Hst 505. **Reading and Conference.** Hours to be arranged.

Hst 507. **Seminar.** Hours to be arranged.

Greek and Roman History. Dill.

European History: French. Lorwin, Birn.

European History: English Eighteenth and Nineteenth Centuries. Smith.

European History: English Sixteenth and Seventeenth Centuries. Lang.

European History: Mediaeval Russia. Alef.

European History: Modern Russia. Kimball.

European History: Social and Economic. Lorwin, Pierson.

European History: German. Berdahl.

United States History: Colonial. Hanna.

United States History: Early National. Govan.

United States History: American Biography. Bingham.

United States History: Diplomatic. Holbo.

American Negro. Porter.

Recent. Pomeroy.

East Asian History. Falconeri, Dull.

Latin American History. Woodham.

Historical Theory. Sorenson.

Hst 508. **Colloquium.** Hours to be arranged.

Roman History. Dill.

Middle Ages. Perrin.

Renaissance and Reformation. Brady.

English Historians. Smith.

Seventeenth-Century England. Lang.

Mediaeval Russia. Alef.

Modern Russia. Kimball.

Age of Enlightenment. Birn.

German History. Berdahl.

Interpretations of American History. Hanna, Porter.

Early National. Govan.

Southern History. Maddex.

American Diplomacy. Holbo.

Interpretations of Latin-American History. Woodham.

Japanese History. Dull, Falconeri.

Historiography. Birn.

Hst 530, 531, 532. **European History: Problems and Interpretations.** 3 hours each term.

Readings, reports, and group discussions of major trends, problems, and interpretations in modern European history. Hst 530: Renaissance and Reformation; Hst 531: the seventeenth and eighteenth centuries; Hst 532: 1789 to the present. Birn, Lorwin, Pierson.

Hst 591. **Japanese Political Evolution since 1912.** 3 hours.

Japanese political institutions and ideologies from 1912 to the present, and their relation to domestic and foreign policies. Prerequisite: Hst 497, 498, 499 or consent of instructor. Dull, Falconeri.

COURSES OFFERED ONLY IN SUMMER SESSIONS

Hst 418, 419. **Studies in Western Civilization.** (g) 3 hours each term.

Hst 490. **Problems of the Pacific.** (g) 3 hours.

* No-grade course.

Home Economics

Professor: MABEL A. WOOD (emeritus).

Assistant Professors: MARGARET J. WIESE (department head),* SALLY L. HANSEN, FAITH JOHNSTON, LOIS E. NELSON, ANIELA E. PELCH, FRANCES VAN VOORHIS.

Instructors: DOROTHY A. HUNTOON, LORAIN MCKENZIE, HATTIE MAE NIXON.

THE UNIVERSITY offers elective courses in three main areas of home economics: clothing, textiles, and related arts; foods and nutrition; and family life and home administration. The courses are designed to prepare students for better home and community living as a part of their liberal education. The University does not offer major work in home economics; in the Oregon State System of Higher Education, major studies in the field are allocated to the School of Home Economics at Oregon State University.

Lower-division instruction in home economics offered at the University of Oregon and at Oregon State University is essentially the same. It is recommended that students intending to major in the field enter the institution where major work is offered at the beginning of their freshman year; they may if they wish, however, spend their freshman and sophomore years at the University of Oregon, and transfer to Oregon State University at the beginning of the junior year, without loss of credit and with fundamental requirements for upper-division standing fully met.

The foods and clothing laboratories of the Department of Home Economics are designed and equipped in accordance with the best modern standards for instruction in these fields.

Secondary-School Teaching of Home Economics. For certification as a teacher of home economics in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

The University of Oregon offers an undergraduate program which satisfies the state standard, but does not offer the additional subject preparation required for permanent certification after a fifth year of study.

For further information, the student should consult the member of the home economics faculty who serves as adviser for prospective teachers.

LOWER-DIVISION COURSES

HEc 121, 122, 123. Clothing Construction. 2 hours each term.

Principles of clothing construction. HEc 121: basic skills in use of patterns, fabrics, and equipment. HEc 122: selection, management, and construction, using silk and manmade fibers. HEc 123: planning and construction of a lined wool suit or coat. It is recommended that the sequence be preceded by HEc 124, 125, 126 or HEc 128 or taken concurrently.

HEc 124, 125, 126. Clothing Selection. 1 hour any term.

Aesthetic and economic factors in the selection of clothing. HEc 124: aesthetic principles of line, color and texture. HEc 125: expression of individuality through clothing. HEc 126: problems of consumer buying of clothing; clothing expenditures of college students and the family.

HEc 127. Textiles. 2 hours any term.

Designed to develop a basic consumer understanding of the characteristics of fibers and fabrics; selection, purchase, and care of fabrics and household linens. Suggested parallel for HEc 121.

* On sabbatical leave 1967-68.

HEc 128. Clothing Selection. 3 hours any term.

Covers in one term the work of HEc 124, 125, 126. For students who wish to take three hours of Clothing Selection in one term. A total of three hours of credit can be earned either in HEc 128, or in HEc 124, 125, 126.

HEc 222. Family Relationships. 2 hours any term.

Values and goals of modern family life; family roles of men and women; choice of a marriage partner; adjustment to family life.

HEc 225. Nutrition. 3 hours any term.

Scientific study of foods; choice of foods for the maintenance of health; common nutritional problems; evaluation of nutritional information provided in the mass media.

HEc 226, 227, 228. Foods. 3 hours each term.

Scientific approach to food preparation; nutritional, managerial, and aesthetic aspects of meal planning. 2 recitations; 2 two-hour laboratory periods.

HEc 250. Camp Cookery. 1 hour any term.

Fundamental principles of cookery applied to simple meals in home and camp. 1 three-hour laboratory period. Open to men only.

UPPER-DIVISION COURSES**HEc 325. Child Care.** 3 hours any term.

Current concepts of growth and development; prenatal care; behavior and development of the preschool child; the needs of the young child in the family; adult-child relationships.

HEc 331. Home Planning and Furnishing. 3 hours any term.

Principles involved in the planning and furnishing of a home in the contemporary world; scientific, aesthetic, and traditional factors.

HEc 339. Household Management. 3 hours any term.

Management principles applied to home life; work simplification; choice, use, and care of basic household equipment.

HEc 340. Consumer Problems. 3 hours any term.

The consumer's role in the marketing system; emphasis on decision-making and buying problems, evaluation of information sources and programs for consumer protection.

HEc 430. Personal and Family Finance. 3 hours any term.

Management of personal and family income, including budgeting, use of consumer credit, insurance, social security, savings and investments, taxes, home ownership, and estate planning.

Industrial and Labor Relations

THE UNIVERSITY offers an interdisciplinary program of graduate study in industrial and labor relations, leading to the Master of Arts or Master of Science degree. The program is administered by the Institute of Industrial and Labor Relations (see page 129).

The student's program must include work in at least three disciplines, with at least 18 term hours in one of the three disciplines, and must include a minimum of 15 term hours in 500-level courses. Before advancement to candidacy for a degree, a student must submit a satisfactory score on the Miller Analogies Test or a comparable objective test.

The following University courses are especially relevant to the graduate program in industrial and labor relations:

Economics—Regional Economics (Ec 414, 415, 416); Contemporary Economic Problems (Ec 417); Labor Economics (Ec 444); Organized Labor (Ec

445); Labor Legislation (Ec 446); Collective Bargaining (Ec 447, 448, 449); Comparative Economic Systems (Ec 450, 451, 452); Industrial Organization and Public Policy (Ec 460, 461, 462); American Economic History (Ec 487, 488, 489); Development of Industrial Economics (Ec 490, 491, 492); Seminar: Labor Economics (Ec 507).

Education—Seminar: Work Evaluation (Ed 407); Seminar: Occupational Information (Ed 407); Educational and Vocational Guidance (Ed 488); Seminar: Vocational Development Theory (Ed 507).

History—American Economic History (Hst 487, 488, 489).

Journalism—Seminar: Industrial Communications and Editing (J 407); Seminar: Public Relations Methods (J 407); The Press and Society (J 450); Principles of Public Relations (J 459); Public Relations Problems (J 483); Journalism and Public Opinion (J 494); Seminar: Public Opinion and Propaganda (J 507).

Law—Agency (L 427); Law: Its Processes and Functions (L 430); Labor Law (L 476).

Political Science—Administrative Organization and Behavior (PS 412, 413); Theory of Democracy (PS 456, 457); The Supreme Court in American Government (PS 484, 485, 486); Seminar: Constitutional Law and the Judicial Process (PS 507); Seminar: Comparative Labor Movements (PS 507); Seminar: Policy Analysis (PS 507); Seminar: Political Organization (PS 507); Seminar: Political Participation (PS 507).

Production and Industrial Management—Personnel Management (PIM 412); Wage and Salary Administration (PIM 413); Problems in Personnel Management (PIM 414); Seminar: Administration of Labor Market Policy (PIM 507); Seminar in Collective Bargaining (PIM 507); Industrial Administration (PIM 511); Personnel Administration (PIM 534); Personnel Psychology (PIM 535); Organizational Conflict and Change (PIM 536).

Sociology—Seminar: Sociology of Professions (Soc 407); Seminar: Economic Sociology (Soc 407); Seminar: Problems of Change in Underdeveloped Areas (Soc 407); Theory of Small Groups (Soc 430); Group Dynamics (Soc 431); Sociology of Work (Soc 446); Industrial Sociology (Soc 447); Sociology of Occupations (Soc 448); Seminar: Sociology of Professions (Soc 507); Theory of Organization (Soc 541).

The Institute of Industrial and Labor Relations provides advice and assistance to doctoral candidates who are interested in work in industrial relations as a minor field or as a supplement to their major program.

Latin American Studies

THE UNIVERSITY offers undergraduate and graduate programs in Latin American studies. Students enrolled in these programs complete regular major requirements in a department of the College of Liberal Arts or a professional school, with additional studies providing an emphasis on the Latin American area. An interdisciplinary committee advises students in the planning of their area studies; Carl Johannessen, associate professor of geography, is chairman of the committee.

The special requirements for a B.A. degree with emphasis on Latin American studies are: (1) two years of college study of Spanish or Portuguese or equivalent; (2) a minimum of 27 term hours in Latin American area courses, other than language, of which at least 18 term hours must be outside the student's major field.

The special requirements for an M.A. or Ph.D. degree with an emphasis on Latin American studies are: (1) competence in Spanish or Portuguese, to be demonstrated by examination; (2) a minimum of 21 term hours in graduate courses in Latin American studies, including 9 hours in an interdisciplinary seminar; (3) a thesis on a Latin American topic, for which a maximum of 9 hours of credit may be applied toward requirement (2).

Linguistics

THE UNIVERSITY OFFERS an undergraduate interdisciplinary curriculum in linguistics, leading to the Bachelor of Arts degree. The program is administered by an interdisciplinary committee of which Clarence Sloat, assistant professor of English, is chairman. As background for the program, the student is expected to have taken two years of either French or German and one year of Greek, Latin, Russian, Japanese, or Chinese. The requirements include: (1) 24 term hours in courses on the general theory of language, including: (a) Descriptive Linguistics (AL 450, 451) or History of the English Language (Eng 491) and Modern English Grammar (Eng 492); (b) Linguistics (Anth 442, 443); (c) History and Structure of the English Language (Eng 522); and (d) Seminar: Comparative Indo-European Linguistics (Eng 407), 3 terms. (2) Symbolic Logic (Phl 461, 462), or Philosophy of Language (Phl 316, 317). The required total of 36 term hours is completed in the major with optional courses, including Language, Culture, and Behavior (Anth 456, 457, 458); Mathematical Logic and Set Theory (Mth 354) or other mathematical courses relevant to the application of mathematical models to linguistics; Old English (Eng 511, 512, 513), Middle English (Eng 517), Middle High German (GL 514, 515, 516), Old French (RL 520, 521, 522), and Old Icelandic (Eng 514, 515, 516) (these latter courses may only be taken in the senior year); and seminars in arts and letters, English, and anthropology.

Mathematics

Professors: A. F. MOORSUND (department head), F. W. ANDERSON, F. C. ANDREWS, PAUL CIVIN, C. W. CURTIS, K. S. GHENT, D. K. HARRISON, EINAR HILLE, I. M. NIVEN, R. F. TATE, L. E. WARD, JR., BERTRAM YOOD.

Associate Professors: R. B. BARRAR, R. S. FREEMAN, H. L. LOEB, E. A. MAIER,* T. K. MATTHES, D. G. MOORSUND, K. A. ROSS,† P. T. RYGG, K. R. STROMBERG, G. W. STRUBLE,‡ D. R. TRUAX, C. R. B. WRIGHT.*

Assistant Professors: B. A. BARNES,† C. T. BENSON, C. M. DEO, M. N. DYER, L. C. GROVE, J. E. HUMPHREYS, R. M. KOCH, J. V. LEAHY, FRANKLIN LOWENTHAL, A. J. SIERADSKI, J. M. VAN BUSKIRK, H. E. WARREN.

Senior Instructors: G. T. BEELMAN, MARIE R. MASON, P. R. SHERMAN.

Instructors: R. B. BURCKEL, R. L. HEILMAN, LULU V. MOORSUND, B. B. WELLS, JR.

Assistants: C. M. BERKOVICS, R. L. BERNHARDT, III, S. A. BOOK, T. C. BURROWES, W. C. CHANG, S. G. CHYA, A. J. CLEMONS, C. V. COMISKY, R. S. CUNNINGHAM, S. N. DUA, J. B. EAGLE, G. L. EERKES, G. E. ENGBRETSSEN, C. E. FORD, T. V. FOSSUM, H. R. GAGE, L. E. GARNER, R. S. GARNERO, G. A. GISLASON, M. P. GREELEY, RITA HALL, R. O. HAMEL, G. D. HART, W. M. HUBBART, W. E. ISLER, R. F. JOHNSONBAUGH, M. A. JUBITZ, D. H. KELKER,

* On sabbatical leave 1967-68.

† On leave of absence 1967-68.

‡ On sabbatical leave, winter and spring terms, 1967-68.

M. R. W. KERVIN, R. A. KREISS, A. J. LADUKE, D. G. LAMET, P. C. LU, W. A. MANNING, K. F. MARTIN, C. J. MILLER, L. K. MOHLER, D. A. PARKER, W. A. PARKER, A. L. PERRIE, W. E. PFAFFENBERGER, R. G. POND, P. S. PUTTER, R. W. RYDEN, III, H. J. SCHMIDT, JR., J. E. SCHNEIDER, D. A. SCHOENFELD, J. H. SCHULTZ, JR., S. M. SIMMONS, L. D. SLINGERLAND, J. R. SPOONER, JR., T. A. SWANSON, M. B. TOMLINSON, L. D. TUCKER, D. R. TURNIDGE, E. D. TYMCHATYN, R. L. WAGONER, W. B. WATSON.

MATHEMATICS COURSES at the University are designed to provide the training in rigorous thinking and analytical processes which is fundamental to a liberal education; to provide basic mathematical and statistical training for students in the social, biological, and physical sciences and in the professional schools; to prepare prospective teachers of mathematics; and to provide advanced and graduate work for students specializing in the field.

Preparation for Major Work. Students planning to major in mathematics at the University should take as much mathematics in high school as they can work into their programs. Courses in algebra, geometry, trigonometry and more advanced topics should be included whether offered as separate courses or in unified form.

Major Programs. Majors usually begin University work in mathematics with Introductory College Mathematics (Mth 104, 105, 106), Preparation for Calculus (Mth 115), Calculus with Analytic Geometry (Mth 200, 201, 202, 203), or Analytic Geometry and Calculus (Mth 204, 205, 206) (the latter sequence is reserved for Honors College and other mathematically well-prepared freshmen). Students not prepared for one of those sequences must make up their deficiencies by taking Intermediate Algebra (Mth 95), offered by the department, and perhaps more elementary courses offered through the Division of Continuing Education. Normally majors take Introductory Linear Algebra (Mth 411), Differential Equations (Mth 418), and Calculus of Several Variables (Mth 419) in the year following calculus. Advisers in certain special programs will recommend departures from the normal when it seems desirable.

Science Group Requirement. Correlated sequences which satisfy the science group requirements are listed on page 94.

Mth 200, 201, 202, 203 (or Mth 204, 205, 206) is the recommended sequence for all well-prepared students. Mth 104, 105, 106 is the standard sequence for students who enter with one and one-half years of high-school algebra, and who intend to major in mathematics, the physical sciences, or architecture, or to take more than one year's work in college mathematics. Fundamentals of Mathematics (Mth 107, 108, 109) provides a distinctive approach to college mathematics for students in the Honors College. The department will recommend suitable sequences in the light of the individual student's interests and mathematics placement-test score.

Requirements for Bachelor's Degree. To qualify for a bachelor's degree with a major in mathematics, a student must complete 48 term hours of work in the field, including Calculus with Analytical Geometry (Mth 200, 201, 202, 203) or Analytic Geometry and Calculus (Mth 204, 205, 206), and at least 30 term hours in upper-division mathematics courses exclusive of Mth 425, 426, 427. Not more than 15 hours selected from Mth 441, 442, 443, Mth 447, 448, 449 may be counted toward the minimum major requirement.

Students preparing for graduate work in any area of mathematics should include in their programs: Mth 411, 418, 419; Mth 415, 416, 417; and Mth 431, 432, 433. Those preparing for graduate work in the areas of probability and statistics should also include: Mth 447, 448, 449 and Mth 454, 455. Other courses should be selected in consultation with the student's adviser. Attainment of a reading knowl-

edge of at least one foreign language chosen from French, German, or Russian is highly recommended.

Secondary-School Teaching of Mathematics. For certification as a teacher of mathematics in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in mathematics and the requirements for unqualified recommendation by the University of Oregon, students should satisfy the requirements for a bachelor's degree with a major in mathematics, and should include in their programs: Calculus (Mth 313), Fundamentals of Algebra (Mth 341, 342, 343), Fundamentals of Geometry (Mth 344, 345), and Fundamentals of Statistics (Mth 346). Regular session courses with similar content and special upper-division and graduate courses offered during summer sessions are acceptable substitutes for these courses.

Nonmajor students who wish to prepare for the teaching of mathematics as a second field should include Fundamentals of Algebra (Mth 341, 342, 343) and Fundamentals of Geometry (Mth 344, 345) in their programs.

For further information, the student should consult the member of the mathematics faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Work. The Department of Mathematics offers graduate work leading to the Master of Arts, Master of Science, and Doctor of Philosophy degrees. Candidates for the Ph.D. degree are accepted in such fields as number theory, algebra, analysis, differential geometry, topology, topological algebra, numerical analysis, and probability and statistics. Students interested in graduate work should consult the head of the department concerning departmental requirements.

Statistical Laboratory and Computing Center. A Statistical Laboratory and Computing Center is operated under the auspices of the Graduate School, in close cooperation with the Department of Mathematics. IBM 1620 and 360/50 electronic computers are available for research and teaching. See pages 125-126.

LOWER-DIVISION COURSES

Mth 95. Intermediate Algebra. 4 hours.

Fundamentals of algebra. Intended for students entering with less than two years of high-school algebra; not open for credit for students entering with four years of high-school mathematics including trigonometry.

Mth 104, 105, 106. Introductory College Mathematics. 4 hours each term.

Intended for majors in the physical sciences, mathematics and architecture, and other students planning to take courses in calculus. Algebra, trigonometry, elements of analytic geometry and calculus. Prerequisite: one and one-half years of high-school algebra or Mth 95.

Mth 107, 108, 109. Fundamentals of Mathematics. 4 hours each term.

A terminal type sequence not intended as preparation for Mth 200 or Mth 204; especially suitable for majors in the social sciences, business administration and the humanities. Elements of mathematical logic and set theory, linear algebra, probability, introductory calculus and other selected topics. Special sections for Honors College students. Prerequisite: one and one-half years of high-school algebra or Mth 95.

Mth 115. Preparation for Calculus. 4 hours.

Selected topics from algebra, trigonometry, and other areas. For entering students who have had a considerable amount of high-school mathematics and whose placement scores indicate a need for a brief course in precalculus mathe-

maths. Prerequisite: placement score just below that required for Mth 200 or consent of department.

Mth 121, 122, 123. Mathematics for Elementary Teachers. 3 hours each term.

Basic concepts of arithmetic, elementary algebra, and elementary geometry. Emphasis on the real number system and deductive processes within the system. Open only to prospective elementary teachers.

Mth 124. Mathematics of Finance. 4 hours.

Simple and compound interest and discount, annuities, periodic-payment plans, bonds, depreciation, mathematics of insurance, and other topics related to business. Prerequisite: Mth 104.

Mth 200, 201, 202, 203. Calculus with Analytical Geometry. 4 hours each term.

Standard sequence for students of physical, biological, and social sciences. Prerequisite: high-school trigonometry and a high placement score; or Mth 115; or Mth 104, 105, 106; or Mth 104 with a grade of A or B and consent. Not open to students who have credit for Mth 204, 205, 206.

Mth 204, 205, 206. Analytic Geometry and Calculus. 5 hours each term.

A unified treatment of analytic geometry and calculus; equivalent of Mth 200, 201, 202, 203. Special section for Honors College and other superior students. Prerequisite: high-school trigonometry and a high placement score; or Mth 115; or Mth 104 with a grade of A or B and consent.

Mth 233. Introduction to Numerical Computation. 3 hours.

Basic principles of computation; programming a computer in an algebraic language. Prerequisite: Mth 104 or equivalent.

Mth 290. Seminar. Hours to be arranged.

Selected topics not covered in the regular lower-division courses. For students of high ability.

UPPER-DIVISION COURSES

Mth 313. Calculus. 4 hours.

Foundations of the calculus. For prospective high-school teachers. Prerequisite: calculus and consent of instructor.

Mth 319. Number Theory. 3 hours.

Divisibility, congruences, number theoretic functions, Diophantine equations. Prerequisite: year sequence in calculus or consent of instructor.

Mth 341, 342, 343. Fundamentals of Algebra. 3 hours each term.

Algebraic topics, for prospective secondary-school teachers of mathematics. Inequalities, congruences, bases of the number system, foundations of algebra, set theory, Boolean algebras, elementary matrix and group theory. Prerequisite: year sequence in calculus or consent of instructor.

Mth 344, 345. Fundamentals of Geometry. 3 hours each term.

Geometric topics, for prospective secondary-school teachers of mathematics. Length, area, volume, and the related limit problem. Ruler and compass constructions, locus problems. Euclidean and non-Euclidean geometries. Coordinate and noncoordinate techniques in the plane and in space. Prerequisite: year sequence in calculus or consent of instructor.

Mth 346. Fundamentals of Statistics. 3 hours.

Topics in probability and statistics, for prospective secondary-school teachers of mathematics. Probability and random variables on finite sets. Binomial and hypergeometric distributions. Random number tables. Frequency distributions and histograms. Algebra of elementary statistical distributions. Tests of hypotheses and linear estimates. Prerequisite: year sequence in calculus or consent of instructor.

Mth 354. Mathematical Logic and Set Theory. 3 hours.

Topics in mathematical logic and set theory. Propositional calculus, algebra of sets, functions and relations, cardinal numbers, ordinal numbers, point sets on the real line. Prerequisite: calculus or consent of instructor.

Mth 403. **Thesis.** Hours to be arranged.

Mth 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Mth 407. **Seminar.** (g) Hours to be arranged.

Mth 411. **Introductory Linear Algebra.** (g) 3 hours.

Computational matrix algebra. Vector spaces, systems of linear equations, matrices, determinants, characteristic roots, quadratic forms and diagonalization. Prerequisite: Mth 202 or Mth 205, or consent of instructor.

Mth 412. **Linear Algebra.** (G) 3 hours.

Proofs of theorems on basis and dimension in abstract vector spaces; linear transformations, the minimal polynomial; determinant of a linear transformation; characteristic roots and vectors; orthogonal, unitary, and symmetric transformations. Prerequisite: Mth 411.

Mth 413. **Geometric Algebra.** (G) 3 hours.

Introduction to the classical linear groups and geometries associated with them. Prerequisite: Mth 412.

Mth 414. **Introduction to Hilbert Space.** (G) 3 hours.

Geometry of infinite dimensional Hilbert space; bounded linear operators and their adjoints; spectral theorem for self-adjoint and unitary operators. Prerequisite: Mth 412.

Mth 415, 416, 417. **Introduction to Abstract Algebra.** (G) 3 hours each term.

Sets, relations, mappings; introduction to the theory of groups, rings, fields, polynomial rings; linear algebra and matrix theory. Prerequisite: Mth 411 or consent of instructor.

Mth 418. **Differential Equations.** (g) 3 hours.

Linear differential equations, applications, systems of equations. Prerequisite: Mth 200, 201, 202, 203 or Mth 204, 205, 206, Mth 411.

Mth 419. **Functions of Several Variables.** (g) 3 hours.

Infinite series, power series, partial differentiation, multiple integrals, and other related topics. Prerequisite: Mth 200, 201, 202, 203 or Mth 204, 205, 206.

Mth 420. **Vector Analysis.** (g) 3 hours.

Vector operations, divergence theorem, Stokes' theorem, applications. Prerequisite: Mth 419 or equivalent.

Mth 421. **Functions of a Complex Variable.** (g) 3 hours.

Cauchy's theorem, residues, contour integration. Prerequisite: Mth 419 or consent of instructor

Mth 422, 423. **Partial Differential Equations.** (g) 3 hours each term.

Topics selected from elementary partial differential equations with emphasis on wave, heat, and Laplace's equations; elementary Sturm-Liouville problems; orthogonal functions; mean convergence; Fourier series; Legendre polynomials; Bessel functions; Fourier and Laplace transforms. Prerequisite: Mth 418, Mth 419, and Mth 421, or equivalent, or consent of instructor.

Mth 425, 426, 427. **Elements of Statistical Methods.** (g) 3 hours each term.

A basic sequence in statistical analysis; not intended for mathematics majors. Presentation of data; sampling theory; tests of significance; analysis of variance and covariance; regression and correlation; sequential analysis; design of experiments; distribution-free techniques. Prerequisite: Mth 95 or equivalent; junior standing.

Mth 428. **Scientific and Statistical Computation.** (G) 3 hours.

Numerical computation, including programming a computer in algebraic language and numerical error control. Prerequisite: Mth 418 or concurrent registration in a 400-level analysis or statistics course.

Mth 431, 432, 433. **Advanced Calculus.** (G) 3 hours each term.

A rigorous treatment of topics introduced in elementary calculus or more-advanced topics basic to the study of real and complex variables. Prerequisite: calculus and upper-division mathematics sequence.

Mth 434. **Linear Computations.** (G) 3 hours.

Matrix norms, solutions of linear equations, computation of eigenvalues and eigenvectors, error analysis, numerical computations. Prerequisite: Mth 411 and credit for or concurrent registration in Mth 428.

Mth 435, 436. **Classical Numerical Analysis.** (G) 3 hours each term.

Finite difference methods and solutions of nonlinear equations; numerical solutions of ordinary differential equations; error analysis, numerical solutions of ordinary differential equations; error analysis, numerical computations, and related topics. Prerequisite: Mth 411 and credit for or concurrent registration in Mth 428 and Mth 418, or consent of instructor.

Mth 437, 438, 439. **Introduction to Topology.** (G) 3 hours each term.

Set theory and transfinite arithmetic, topological spaces, metric spaces, compact and connected sets, continuous mappings, metrization, topology of the plane, and other selected topics. Prerequisite: calculus.

Mth 441, 442, 443. **Introduction to Statistical Theory.** (g) 3 hours each term.

Designed primarily for nonmajors who have a working knowledge of calculus and for mathematics majors intending to take no further work in statistics. Topics covered include: elementary theory of probability, sampling theory, estimation, hypothesis testing, sequential and nonparametric methods, elementary decision theory. Prerequisite: calculus.

Mth 444. **Computing.** (g) 4 hours.

Introduction of the principles of digital computers; analysis of data-processing systems; programming languages and techniques; selected advanced topics of current interest. Prerequisite: Mth 233.

Mth 445. **System Programming.** (G) 4 hours.

Study of computer operating systems, input and output systems, assembler and compiler construction. Prerequisite: Mth 444.

Mth 446. **Nonnumeric Information Processing.** (G) 4 hours.

Topics selected from: generation, development, and processing of data structures; symbol manipulation; systems simulation; use of computer language for description of simulation models; ideas and examples of heuristic programming; techniques and computer languages in information retrieval. Prerequisite: Mth 444.

Mth 447, 448, 449. **Mathematical Statistics.** (G) 3 hours each term.

Combinatorial probability; development of distribution theory from the theory of probability; derivation of sampling distributions; introduction to theory of statistical estimation and inference. Prerequisite: calculus and upper-division mathematics sequence.

Mth 454, 455. **Discrete Probability Theory and Application.** (g) 3 hours each term.

Discrete sample spaces, combinatorial analysis, limit theorems for discrete random variables, recurrent events, Markov chains and applications, non-measure-theoretic treatment of simple stochastic processes. Prerequisite: one year of calculus or consent of instructor.

Mth 487, 488, 489. **Geometry.** (G) 3-4 hours each term.

Axiomatic development of absolute geometries from both the synthetic and metric points of view; Euclidean and Lobachevskian geometry; area theory; ruler and compass constructions; elements of projective geometry; subgeometries of projective geometry. Intended primarily for secondary school and prospective secondary school mathematics teachers. Prerequisite: calculus and senior or graduate standing or consent.

GRADUATE COURSES

*Mth 501. **Research.** Hours to be arranged.

*Mth 503. **Thesis.** Hours to be arranged.

Mth 505. **Reading and Conference.** Hours to be arranged.

Mth 507. **Seminar.** Hours to be arranged.

Algebraic Geometry. Humphreys, Leahy.

Algebraic Topology. Dyer, Sieradski.

Applied Mathematics. Lowenthal, Yood.

Banach Algebras. Yood.

Commutative Algebra. Anderson, Harrison.

Complex Variable Theory. Koch, Lowenthal.

Computing. Struble.

Differential Geometry. Koch, Leahy.

Fourier Analysis. Ross.

Function Algebras. Civin.

Groups and Representations. Curtis, Grove, Wright.

Harmonic Analysis. Ross, Stromberg.

Homological Algebra. Anderson, Harrison.

Knot Theory. Van Buskirk.

Lie Algebras and Algebraic Groups. Curtis, Humphreys.

Noncommutative Rings. Anderson, Curtis, Harrison.

Number Theory. Niven.

Numerical Analysis. Loeb, Struble.

Selected Topics for Mathematics Teachers. Ghent, Maier, Moursund.

Statistics and Stochastic Processes. Andrews, Matthes, Tate, Truax.

Topics in Functional Analysis. Civin, Ross, Stromberg, Yood.

Topological Semi-Groups. Ward.

Topology. Dyer, Sieradski, Van Buskirk, Ward.

Mth 531, 532, 533. **Linear Analysis in Applied Mathematics.** 3 hours each term.

Topics selected from the theory of integral equations, calculus of variations, partial differential equations, boundary value problems, linear operators, integral transforms, spectral theory distributions, eigenfunction expansions with applications.

Mth 541, 542, 543. **Abstract Algebra.** 3 hours each term.

Group theory, fields, Galois theory, algebraic numbers, matrices, rings, algebras.

Mth 544, 545, 546. **Structure of Rings and Algebras.** 3 hours each term.

Topics selected from: rings with minimum condition, algebras over a commutative ring, rings without finiteness assumptions, and nonassociative rings and algebras.

Mth 547, 548, 549. **Algebraic Number Theory.** 3 hours each term.

Algebraic, irrational, transcendental, and normal numbers; approximation of algebraic and transcendental numbers by rationals.

Mth 551, 552, 553. **Theory of Functions of a Real Variable.** 3 hours each term.

Measure and integration, Hilbert and Banach spaces, and related topics.

Mth 554, 555, 556. **Theory of Functions of a Complex Variable.** 3 hours each term.

The theory of Cauchy, power series, contour integration, analytic continuation, entire functions, and related topics.

Mth 557, 558, 559. **Topics in Classical Analysis.** 3 hours each term.

Fourier series, Fourier transforms, integral equations, linear operations in Hilbert space, spectral theory.

Mth 561, 562, 563. **Modern Theories in Analysis.** 3 hours each term.

Measure theory, Banach spaces and algebras, analysis in topological groups;

* No-grade course.

modern functional analysis, with emphasis on the connections with classical analysis and on applications to harmonic analysis.

Mth 571, 572, 573. **Topology.** 3 hours each term.

General and point set topology, introduction to algebraic topology.

Mth 581, 582, 583. **Theory of Estimation and Testing Hypotheses.** 3 hours each term.

Classical theory of testing and estimation, BAN estimates, moment estimates, sequential analysis.

Mth 584, 585, 586. **Theory of Probability.** 3 hours each term.

Elements of measure theory, probability in abstract spaces, random variables, independence, cumulative distribution functions, characteristic functions, moments, convergence of distributions, the central limit problem, infinitely divisible distributions; applications to statistics.

Mth 587, 588. **Stochastic Processes.** 3 hours each term.

A nonmeasure-theoretic introduction to the theory of stochastic processes; processes discrete in space and time, discrete in space and continuous in time, continuous in space and time; applications.

Mth 591, 592, 593. **Advanced Mathematical Statistics.** 3 hours each term.

Topics selected from: analysis of variance and design of experiments; multivariate analysis; sampling from finite populations; nonparametric methods.

Mth 594. **Theory of Games.** 3 hours.

The theory of games, with special emphasis on zero-sum two-person games.

Mth 595, 596. **Statistical Decision Theory.** 3 hours each term.

Statistical decision theory based on the theory of games; sequential decision theory; comparison of experiments.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Mth 10. **Elements of Algebra.** No credit (extension).

Mth 457, 458, 459. **Foundations of Mathematics.** (g) 3-4 hours each term (summer sessions).

Mth 468, 469. **Probability and Statistics.** (g) 3-4 hours each term (summer sessions).

Mth 478, 479. **Algebra.** (g) 3-4 hours each term (summer sessions).

Mth 498, 499. **Analysis.** (g) 3-4 hours each term (summer sessions).

Mth 578, 580. **Algebra.** 3-4 hours each term (summer sessions).

Mth 589. **Geometry.** 3-4 hours (summer sessions).

Mth 598, 599. **Analysis.** 3-4 hours each term (summer sessions).

Medical Technology

THE UNIVERSITY offers a four-year program in medical technology, leading to the bachelor's degree. The program includes three years of work on the Eugene campus and one year at the Medical School in Portland. During his three years on the Eugene campus, the student must satisfy (1) all general University degree requirements, for majors in professional schools, that cannot be satisfied with work taken at the Medical School, and (2) the special science requirements for admission to the fourth-year program at the Medical School. The following recommended courses satisfy the science requirements:

	Term Hours
Mathematics (above Mth 10).....	12
General Biology (Bi 101, 102, 103).....	12
General Chemistry (Ch 104, 105, 106).....	9
Inorganic Qualitative Analysis (Ch 108)	2
Intro. Volumetric Analysis (Ch 109)	2
Organic Chemistry (Ch 334, 335, Ch 337, 338).....	10
Quantitative Analysis (Ch 320).....	4
Essentials of Physics (Ph 101, 102, 103)	9
Intro. to Bacteriology (Bi 381, 382).....	6
Upper-division biology	6

For an outline of the fourth-year program, see the University of Oregon Medical School Catalog.

Medicine, Preparatory

THE UNIVERSITY offers a premedical program which satisfies the requirements for admission to American medical schools, including the University of Oregon Medical School in Portland. The program is supervised by a special advisory committee, of which Dr. Bradley T. Scheer, professor of biology, is chairman.

Medical schools have varying admission requirements. The requirements of the several schools are listed in *Medical School Admission Requirements*, an annual volume published by the Association of American Medical Colleges; students planning to seek admission to a particular school should consult this volume, and plan their premedical studies to satisfy any special requirements of the school.

Nearly all medical schools require applicants to take the Medical College Admissions Test. The test is given twice each year, in October and May; students are advised to take the test in May of the calendar year before they plan to enter medical school. Application for permission to take the test must be made about a month before the scheduled date. Application blanks may be obtained in the Office of Admissions.

The University of Oregon Medical School requires that the student must have earned a B.A. or B.S. degree before entrance or must complete the work for the degree at the University of Oregon, or at the institution at which he received his premedical preparation, before entering upon the work of the third year at the Medical School. Under University of Oregon regulations, a maximum of 48 term hours of work in medicine may be counted as credit earned in residence toward the bachelor's degree.

Students who expect to complete the requirements for a bachelor's degree at the Medical School should satisfy, in their premedical program, all requirements for the degree (including general University requirements and requirements for a major in the College of Liberal Arts) that cannot be satisfied with work taken at the Medical School.

Many students elect a departmental major in the College of Liberal Arts (history, biology, chemistry, physics, etc.); these students should consult their departmental adviser at the beginning of their junior year concerning major requirements. Students may also elect a more general program leading to a major in general science.

The following courses satisfy both the science requirements for admission to the University of Oregon Medical School and, with additional science instruction at the Medical School, the requirements for a major in general science:

	Term Hour
Mathematics (above level of Mth 95)	12
General Chemistry (Ch 104, 105, 106)	9
Introductory Chemistry Laboratory (Ch 107), Introductory Analytical Chemistry I (Ch 108), Introductory Analytical Chemistry II (Ch 109)....	6
Quantitative Analysis (Ch 320)	4

	Term Hours
General Physics (Ph 201, 202, 203, Ph 204, 205, 206)	15
Organic Chemistry (Ch 331, 332, Ch 337, 338)	10
Core Biology I and II (Bi 301, 302, 303, 304)	20

Honors. See HONORS COLLEGE, pages 130 ff.

Nursing, Preparatory

Professor: JEAN E. BOYLE (director).

Associate Professor: GUHLI J. OLSON (in charge of prenursing program).

Assistant Professor: RUTH BRANCONI.

THE UNIVERSITY offers on the Eugene campus a three-term prenursing curriculum to prepare students for admission to the University of Oregon School of Nursing located on the campus of the Medical School in Portland. The student enters the School of Nursing in the summer term after her freshman year. The total nursing curriculum, leading to the B.S. degree, requires four academic years and one summer term for completion.

The requirements for admission to the School of Nursing are as follows:

(1) Completion of a required freshman program at the University of Oregon, or at any accredited junior college, college, or university whose program is acceptable for transfer of credit to the University of Oregon.

(2) A grade-point average of at least 2.00 for the freshman-year program.

(3) A satisfactory rating on the National League for Nursing Prenursing and Guidance Examination. This examination should be taken early in the student's freshman year; application to take the examination should be made well in advance. Prenursing students should consult their prenursing adviser or write to the School of Nursing concerning examination dates.

Initial application for admission to the School of Nursing should be made in January of the student's freshman year. A transcript showing completion of the prenursing requirements should be filed at the close of the spring term in June. Because of the professional nature of nursing and the responsibility of the profession to the public, the faculty of the school has established high standards of student selection.

The required freshman prenursing program is outlined below:

	Term Hours
Chemistry (Ch 101, 102, 103 or Ch 104, 105, 106)	12
English Composition (Wr 121, 122, 123)	9
Literature (Eng 101, 102, 103 or Eng 104, 105, 106 or Eng 107, 108, 109)	9
Social science group	9
Nutrition (HEc 225)	2
Fundamentals of Speech (Sp 121)	3
Physical education	3
Electives—Background for Nursing (Nur 121) recommended	3

For a detailed outline of the total nursing program, see the School of Nursing Catalog; copies of the Catalog may be obtained by writing to: Director, University of Oregon School of Nursing, 3181 S.W. Sam Jackson Park Road, Portland, Oregon.

LOWER-DIVISION COURSE

Nur 121. **Background for Nursing.** 3 hours.

The historical background of modern social and health movements; the relation of these to the evolution of nursing as a profession. Olson.

Pharmacy, Preparatory

THE UNIVERSITY OF OREGON offers a one-year prepharmacy program to prepare students for admission to the Oregon State University School of Pharmacy or other accredited pharmacy schools. The following courses are required:

	Term Hours
Introductory College Mathematics (Mth 104, 105, 106)	12
General Biology (Bi 101, 102, 103)	12
General Chemistry (Ch 104, 105, 106, Ch 108, Ch 109)	13
English Composition (Wr 121, 122, 123)	9
Physical Education	3

The professional program in pharmacy at Oregon State University is a four-year curriculum following one year of preprofessional work.

Philosophy

Professors: B. E. JESSUP,* F. B. EBERSOLE†.

Associate Professors: HENRY ALEXANDER (department head), JOHN COOK, R. T. HERBERT, ARNULF ZWEIG‡.

Assistant Professor: D. S. LEVI.

Instructors: L. GEDDES, P. KUSHNER, J. K. STEPHENS.

Assistants: J. T. ALEXANDER, J. K. BRAMANN, R. B. CLARK, G. W. FOULKES, G. K. KEDL, A. D. MANDELBERG, N. A. MARSHALL, F. E. MOSEDALE, J. D. NANMOUR, T. G. PLACE, A. A. ROSENHOLM, C. E. VAN ANTWERP.

THE DEPARTMENT OF PHILOSOPHY offers a major program leading to the Bachelor of Arts or Bachelor of Science degree. The lower-division courses in philosophy provide an introductory survey; the upper-division courses provide a more intensive study of selected philosophical problems and authors.

The minimum major requirement is 45 term hours of work in philosophy with grades of C or better, including 36 hours in upper-division courses. The 45-hour requirements must include History of Ancient Philosophy (Phl 301, 302, 303), History of Modern Philosophy (Phl 304, 305, 306), Symbolic Logic (Phl 461, 462) or History of Logic (Phl 458, 459), and 6 hours of courses on the works of specific authors. Courses of study must be arranged in consultation with department head.

The department also offers a graduate program leading to the Master of Arts and Doctor of Philosophy degrees. Programs are arranged in consultation with the department head.

Honors. See HONORS COLLEGE, pages 130 ff.

LOWER-DIVISION COURSES

Phl 201, 202, 203. **Problems of Philosophy.** 3 hours each term.

An introduction to philosophical problems through the study of philosophical classics. Phl 201 is a prerequisite for Phl 202. Phl 201 and 202 are prerequisites for Phl 203.

Phl 207, 208, 209. **Introduction to Philosophy (Honors College).** 3 hours each term.

Introduction to the study of some significant problems of philosophy and

* On leave of absence 1967-68.

† On sabbatical leave, fall and winter terms, 1967-68.

‡ On leave of absence, fall term, 1967-68.

philosophical methods; concerned primarily with topics in logic, ethics, metaphysics, and theory of knowledge. Open only to students in the Honors College.

Phl 221. Elementary Logic. 3 hours.

An introduction to the study of reasoning. How to recognize, analyze, criticize, and construct the main types of argument and proof.

Phl 222. Elementary Aesthetics. 3 hours.

An elementary study of aesthetic fact and value, and of the relation of aesthetic interest to other human interests, such as the moral, the intellectual, and the religious.

UPPER-DIVISION COURSES

Phl 301, 302, 303. History of Ancient Philosophy. 3 hours each term.

Survey of the history of philosophy from the pre-Socratic to the mediaeval period, with particular attention to Plato and Aristotle.

Phl 304, 305, 306. History of Modern Philosophy. 3 hours each term.

Survey of the history of western philosophy from Descartes to the twentieth century.

Phl 307, 308, 309. Social and Political Philosophy. 3 hours each term.

A survey of the major social and political theories from Plato through Marx. Inquiry into such ideas as justice, natural law, natural rights, and the social contract.

Phl 314, 315. Ethics. 3 hours each term.

Study of the most important traditional ethical theories; modern philosophical analysis of moral terms and statements.

Phl 316, 317. Philosophy of Language. 3 hours each term.

Examination of philosophical theories of language and meaning; ideals and methods of clarification; definition analysis; philosophy as study of language. Selected readings.

Phl 320, 321. Theory of Knowledge. 3 hours each term.

A study of the source, certainty, and limits of human knowledge as well as the ground and nature of belief. Rationalism, empiricism and skepticism. Theories of perception. The problem of abstraction. The nature of truth. Offered alternate years.

Phl 328, 329. Modern American Philosophy. 3 hours each term.

Intensive study of selected works of major American philosophers from the late nineteenth century to the present.

Phl 339, 340. Introduction to Philosophy of Science. 3 hours each term.

Analysis of basic concepts of science such as "explanation," "chance," "causation," etc. Nature of mathematics and its relation to science.

Phl 350, 351. Metaphysics. 3 hours each term.

A critical treatment of traditional issues in metaphysics, selected from among such topics as substance, existence, time, causation, God, the nature of persons, the meaningfulness of metaphysics. Offered alternate years.

Phl 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Phl 407. Seminar. (G) Hours to be arranged.

Philosophy of History.
Descartes.
Berkeley.

Phl 411. Plato. (G) 3 hours.

Analysis of Plato's major dialogues. Offered alternate years.

Phl 413. **Aristotle.** (G) 3 hours.

Aristotle's major writings on theory of knowledge, metaphysics, and ethics. Offered alternate years.

Phl 419. **Locke.** (G) 3 hours.

A study of Locke's accounts of knowledge, language, personal identity, substance, and his distinction between primary and secondary qualities. Offered alternate years.

R 419, 420. **Philosophy of Religion.** (g) 3 hours each term, fall and winter.

For description, see page 230. Does not count toward a major in philosophy.

Phl 421. **Leibniz.** (G) 3 hours.

A study of Leibniz's writings in logic and metaphysics. Offered alternate years.

R 423, 424, 425. **Contemporary Concepts of God.** (g) 3 hours each term.

For description, see page 230. Does not count toward a major in philosophy.

Phl 425. **Hume.** (G) 3 hours.

Hume's writings on knowledge, morals, and religion. Offered alternate years.

Phl 427, 428. **Kant.** (G) 3 hours each term.

Kant's major writings in epistemology, ethics and the philosophy of religion: *Critique of Pure Reason*, *Foundations of the Metaphysics of Morals*, *Critique of Practical Reason*, *Religion Within the Limits of Reason Alone*. Offered alternate years.

Phl 431, 432. **Philosophy in Literature.** (G) 3 hours each term.

Selective study of major philosophical ideas and attitudes expressed in the literature of Europe and America.

Phl 435. **Existentialism.** (G) 3 hours.

The basic ideas of the Christian and atheistic divisions of the existentialist movement; reading of selected works of Kierkegaard, Jaspers, Heidegger, and Sartre; some attention to precursors and to the general modern philosophical situation which negatively has generated the existentialist "rebellion."

Phl 438. **Kierkegaard.** (G) 3 hours.

An examination of Kierkegaard's major philosophical and polemical writings: *Concluding Unscientific Postscript*, *Either/Or*, *The Sickness unto Death*, *The Attack on 'Christendom'*. Offered alternate years.

Phl 441, 442, 443. **Aesthetics.** (G) 3 hours each term.

Systematic study of the meaning and value of aesthetic experience in everyday life and in the arts—painting, music, literature, etc.

Phl 447, 448. **Wittgenstein.** (G) 3 hours each term.

A study of Wittgenstein's *Tractatus Logico-Philosophicus*, *Philosophical Investigations*, and several minor works. Offered alternate years.

Phl 449, 450. **Philosophy of Mind.** (G) 3 hours each term.

Analysis of some basic concepts of psychology, such as "mind" and "behavior": discussion of the mind-body problem and of methodological issues in psychology.

Phl 453, 454. **Analytic Philosophy.** (G) 3 hours each term.

A critical study of recent analytic philosophy, with special emphasis on the writings of the logical positivists and their predecessors and of contemporary British "linguistic" philosophers.

Phl 455, 456. **Philosophy of Religion.** (G) 3 hours each term.

An intensive study of specific issues arising from reflection upon such topics as the nature of faith, proofs for the existence of God, the nature of divine attributes, the problem of evil, and religious ethics. Offered alternate years.

Phl 458, 459. **History of Logic.** (G) 3 hours each term.

A study of writers in the philosophy of logic: e.g., Plato, Aristotle, the

Stoics, Ockham, Frege, Strawson. Offered alternate years. Not offered 1968-69.

Phl 461, 462. **Symbolic Logic.** (G) 3 hours each term.

A consideration of the critical results of mathematical logic; e.g., the completeness and undecidability of the predicate calculus, the essential incompleteness of elementary number theory, set and recursive function theory. Offered alternate years.

Phl 463. **Philosophy of Mathematics.** (G) 3 hours.

The status of mathematical theorems and formulas; truth and falsity, necessity, justification in mathematics; Hilbert's program; Frege; mathematics and the world. Offered alternate years.

Phl 465. **Logical Theory.** (G) 3 hours.

Formal and informal logic; proof; acceptability of logic; measuring, computing, formalizing and arguing, contradiction and paradox. Offered alternate years.

Phy 468. **Problems in Philosophy of Science.** (G) 3 hours.

Probability and statistics; the nature of scientific discovery; hypothetico-deductive systems; the scope of science; science and metaphysics. Prerequisite: Phl 339, 340 or consent of instructor. Offered alternate years.

GRADUATE COURSES

*Phl 501. **Research.** Hours to be arranged.

*Phl 503. **Thesis.** Hours to be arranged.

Phl 505. **Reading and Conference.** Hours to be arranged.

Phl 507. **Seminar.** Hours to be arranged.

Aristotle.

Metaphysics.

Analytic Aesthetics.

Phl 511, 512, 513. **Problems of Knowledge.** 3 hours each term.

Examinations of attempts at philosophical analysis and justification of knowledge; perception, memory, induction, the self and other selves.

Phl 514, 515, 516. **Ethical Theory.** 3 hours each term.

An examination of contemporary ethical theory.

Phl 517, 518. **Problems in Philosophy of Language.** 3 hours each term.

Analysis of current issues in the philosophy of language. Prerequisite: Phl 316, 317 or consent of instructor. Offered alternate years.

Phl 523, 524. **Problems in Philosophy of Mind.** 3 hours each term.

Examination of current literature on perception, action, intention, motives and causes, other minds. Prerequisite: Phl 449, 450 or consent of instructor. Offered alternate years.

Physics

Professors: R. J. DONNELLY (department head), S. Y. CH'EN, BERND CRASEMANN,[†] F. E. DART, E. G. EBBIGHAUSEN, R. T. ELLICKSON, M. D. GIRARDEAU, J. W. McCLURE, M. J. MORAVCSIK, J. L. POWELL, G. H. WANNIER.[†]

Associate Professors: J. C. KEMP, H. W. LEFEVRE, D. K. MCDANIELS.

Assistant Professors: P. L. CSONKA, R. J. HIGGINS, G. D. MAHAN, K. J. PARK, G. W. RAYFIELD, R. L. ZIMMERMAN.

Senior Instructors: J. C. BURG, J. V. RADOSTITZ.

* No-grade course.

[†] On sabbatical leave 1967-68.

Instructor: S. B. W. ROEDER.

Associates: R. M. BAHNSEN, E. F. GIBSON, J. B. MEHL, J. A. NORTHBY, GUSTAV OBERMAIR.

Assistants: R. W. AMAN, K. W. BATTLESON, H. E. BIRDSEYE, D. B. BIVIN, R. L. BOWERS, D. L. BRIDGES, S. E. BROWN, C. A. BURKE, YUNG-KWANG CHANG, CHI-SHIH CHEN, MAU HSIUN CHEN, JACK CHENG, S. D. CLOUD, J. F. DOAR, K. W. DOLAN, B. D. EVANS, L. F. FAGERSTEN, I. W. FRANKEL, D. E. GILBERT, J. A. GLAZE, Y. N. GORADIA, R. D. GRAVES, R. A. HEINLE, P. K. HENRY, J. A. HUGHES, B. D. JOHNSON, H. D. KAEHN, D. W. KNEFF, DOUGLAS LEE, J. W. LEONARD, TSU-HUEI LIU, A. T. LONSETH, M. T. LUNNON, R. P. MITCHELL, F. A. MODINE, T. C. OWEN, C. J. PILUSO, TOMAZ RUPNIK, WERNER SCHULZ, F. E. SEVERSON, D. M. STRAYER, D. K. TAN, J. W. VARGA, H. S. WAFF, W. R. WYLIE, CHENG-CHIH YAN, WING-YIN YU.

COURSES OFFERED by the Department of Physics are planned to provide basic training for professional physics majors, for persons who wish to obtain a broad liberal arts education centered around a major in physics, for major students in other science fields, for premedical and preidental students, and for students planning to teach the physical sciences in the secondary schools.

Preparation for Major Work. Students planning to major in physics at the University should take as much mathematics in high school as possible. Students entering with insufficient preparation in mathematics must remedy their deficiencies in elementary courses offered by the University. Substantial preparation in English and a foreign language is expected. High-school work in chemistry and physics is desirable but not required.

Requirements for Bachelor's Degree. To qualify for a bachelor's degree with a major in physics, a student must complete 39 term hours of work in the field, including General Physics (Ph 201, 202, 203), General Physics Laboratory (Ph 204, 205, 206); and at least 24 term hours in upper-division physics courses including Advanced General Physics (Ph 320, 321, 322). All physics majors must complete a year sequence in differential and integral calculus and a year sequence in chemistry, including laboratory.

Students preparing for graduate work in physics should include in their programs: Electricity and Magnetism (Ph 431, 432, 433), Modern Physics (Ph 411, 412, 413), a year sequence in advanced mathematics (Mth 418, 419, 420), and at least one additional upper-division sequence in physics.

Science Group Requirement. Any one of the following sequences will satisfy the science group requirement: Essentials of Physics and General Physics Laboratory (Ph 101, 102, 103, Ph 204, 205, 206); Descriptive Astronomy (Ph 104, 105, 106); General Physics (Ph 201, 202, 203).

Secondary-School Teaching of Physics. For certification as a teacher of physics in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

For information concerning subject preparation required to meet state standards in physics and to obtain the recommendation of the University of Oregon, the student should consult the member of the faculty of the Department of Physics who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Work. The Department of Physics offers a program of graduate work leading to the M.A., M.S., and Ph.D. degrees, with a variety of opportunities for research. Research in the Department of Physics currently includes theoretical

and experimental work in solid state physics, nuclear physics, the physics of fluids, and atomic physics.

A placement examination is given entering graduate students in the fall. The examination covers only the field of mechanics and electricity. Students who show a lack of preparation in either of these fields are required to take the necessary undergraduate courses, without graduate credit.

Course requirements for a master's degree in physics include: acceptable undergraduate preparation; two year-long course sequences in physics, one of which must be a 500 sequence; and one of the following sequences in mathematics: Advanced Calculus (Mth 431, 432, 433), Applied Mathematics Seminar (Mth 507), Theory of Functions of a Real Variable (Mth 551, 552, 553), Theory of Functions of a Complex Variable (Mth 554, 555, 556), Topics in Classical Analysis (Mth 557, 558, 559).

LOWER-DIVISION COURSES

Ph 101, 102, 103. **Essentials of Physics.** 3 hours each term.

For students not majoring in physics, chemistry, or biology but whose major requires a sound technical knowledge of fundamental principles, and for others interested in general physics requiring less mathematical preparation than Ph 201, 202, 203. 3 lectures. Prerequisite: Mth 95. Roeder.

Ph 104, 105, 106. **Descriptive Astronomy.** 4 hours each term.

Descriptive treatment of both the solar and stellar systems, including the earth, moon, sun, planets, comets and meteors, properties of individual stars, star clusters, bright and dark nebulae, double and multiple stars, variable stars, our galaxy, the extragalactic system, and the expanding universe. Occasional viewing of celestial objects with a telescope. 4 lectures. Ebbighausen.

Ph 201, 202, 203. **General Physics.** 4 hours each term.

First-year college physics for science majors. 3 sections: standard section—3 lectures, 1 discussion session; honors and physical science majors section, 4 lectures. Prerequisite: for standard section, Mth 104, 105 or equivalent, or consent of instructor; for honors section and physical science section, prior study of calculus or concurrent registration in Mth 200 or Mth 204. Rayfield, Mehl, Wannier.

Ph 204, 205, 206. **General Physics Laboratory.** 1 hour each term.

Planned to accompany Ph 101, 102, 103 or Ph 201, 202, 203. 1 two-hour laboratory period. Burg.

UPPER-DIVISION COURSES

(Unless an exception is noted in the course description, general physics and calculus are prerequisite to all upper-division and graduate courses.)

Ph 320, 321, 322. **Mechanics and Thermal Physics.** 4 hours each term.

Fundamental principles of Newtonian mechanics; brief introduction to Lagrange's equations; thermodynamics and kinetic theory of gases; introduction to statistical mechanics. 4 lectures. McCarthy.

Ph 401. **Research.** Hours to be arranged.

Ph 405. **Reading and Conference.** Hours to be arranged.

Ph 409. **Special Laboratory Problems.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ph 407. **Seminar.** (G) Hours to be arranged.

Ph 411, 412, 413. **Modern Physics.** (G) 3 hours each term.

Brief introduction to special relativity. The experimental foundations of quantum physics. Basic ideas and methods of elementary quantum mechanics, with applications to atomic physics. Introductory nuclear physics. Prerequisite: Ph 320, 321, 322 or consent of instructor. 3 lectures. Lefevre.

Ph 417, 418. Atomic and Nuclear Physics. (g) 3 hours each term.

Atomic structure, elements of spectroscopy. Radioactivity, nuclear reactions, nuclear structure; selected topics in quantum physics. Designed for students preparing for secondary-school teaching. 3 lectures. Ellickson.

Ph 427, 428, 429. Electronics. (G) 3 hours each term.

An introduction to electronic circuits and techniques of special relevance to measurements in present-day experimental physics. Linear passive networks: response to DC, AC, and transient signals. Nonlinear circuit elements, tubes and transistors: introduction to their behavior and simple applications. Operational amplifiers: their use in measurement, control, and analog computing. Digital measurement techniques. Basic microwave techniques. 2 lectures; 1 three-hour laboratory. Higgins.

Ph 431, 432, 433. Electricity and Magnetism. (g) 3 hours each term.

Advanced undergraduate study of electromagnetic phenomena, with emphasis on vector methods; Maxwell's equations and electromagnetic waves. Prerequisite: Ph 320, 321, 322 or consent of instructor. Moravcsik.

Ph 434, 435, 436. Advanced Physical Measurements. (G) 1 or 2 hours each term.

Primarily for advanced students interested in experimental physics. Selected topics in electronics and in nuclear and solid state physics instrumentation. Course material adapted to students' interests when possible. Lectures and laboratory.

Ph 441, 442, 443. Optics. (G) 4 hours each term.

Theory of optical images, aberrations; effects of apertures, optical instruments; interference, diffraction, polarization, double refraction, optical activity, dispersion, absorption, scattering, theory of reflection, the nature of light. Kemp.

Ph 444. Spectrochemical Analysis. (G) 3 hours.

Methods of excitation, qualitative analysis, photographic photometry, methods of quantitative analysis, analysis of absorption spectra, practical applications to various fields of industry and research. 2 lectures; 1 three-hour laboratory period. Ch'en.

Ph 471, 472, 473. Introduction to Theoretical Physics. (G) 3 hours each term.

Mathematical treatment of theories of classical and quantum physics. Prerequisite: Ph 320, 321, 322 and concurrent registration in Ph 411, 412, 413.

Ph 481, 482, 483. Introduction to Quantum Mechanics. (G) 3 hours each term.

Elementary quantum mechanics; the Shroedinger equation, wave functions and wave packets, uncertainty principle, hermitian operators, one-dimensional problems, the WKB approximation, angular momentum and spin, the hydrogen atom, identical particles, approximate methods, scattering theory, electromagnetic radiation. Prerequisite: Ph 320, 321, 322 and concurrent registration in Ph 411, 412, 413; or consent of instructor. McDaniels.

GRADUATE COURSES***Ph 501. Research.** Hours to be arranged.***Ph 503. Thesis.** Hours to be arranged.**Ph 505. Reading and Conference.** Hours to be arranged.**Ph 507. Seminar.** Hours to be arranged.

Experimental Solid State Physics.

Nuclear Physics.

Advanced Quantum Theory.

Elementary Particles.

Liquid Helium.

Astrophysics.

General Relativity.

Advanced Elementary Particles

* No-grade course.

Ph 517, 518, 519. **Quantum Mechanics.** 3 hours each term.

Matter waves and Schrodinger equation; statistical interpretation; measurement process; uncertainty relations; complementarity; classical limit and WKB approximation; scattering; symmetries and conservation laws; identical particles and permutation symmetry; approximation methods; Dirac equation; field quantization and radiation theory; recent advances. Girardeau.

Ph 524, 525, 526. **Nuclear Physics.** 3 hours each term.

Interaction of radiation with matter; detectors; accelerators; properties of nuclei; weak and electromagnetic interactions; elements of nuclear structure, including the two-nucleon system and models of complex nuclei; basic theory of nuclear reactions; subnuclear particles. 3 lectures. Prerequisite: an introductory course in quantum mechanics, such as Ph 481, 482, 483. Crasemann.

Ph 538, 539, 540. **Theoretical Mechanics.** 3 hours each term.

Lagrangian and Hamiltonian mechanics; rigid bodies; special relativity; canonical transformations; Hamilton-Jacobi theory; small oscillations; continuous systems and fields. 3 lectures. Kemp.

Ph 541, 542, 543. **Theoretical Nuclear Physics.** 3 hours each term.

Theory of nuclear reactions and their use in obtaining information about nuclear structure. 3 lectures. Csonka, Moravcsik.

Ph 544, 545, 546. **Electromagnetic Theory.** 3 hours each term.

Microscopic form of Maxwell's equations; derivation and solution of the wave equation; relativistic formulation; motion of charges in given fields; propagation and diffraction; radiation by given sources; coupled motion of sources and fields; the electromagnetic field in dense media. 3 lectures. Powell.

Ph 551, 552, 553. **Atomic Spectra.** 3 hours each term.

Relation of observed spectra to the theory of atomic and molecular structure, quantum mechanical model, electron configurations, spectral terms, Zeeman effect, Stark effect, hyperfine structure, X-ray spectra; spectral line shape; rotational, vibrational, and electronic band spectra of diatomic molecules. Ch'en.

Ph 554, 555, 556. **Experimental Spectroscopy.** 1 hour each term.

Spectroscopic instruments (prismatic and grating); flame, arc, and spark spectra of elements; analysis of series lines in atomic spectra; Zeeman effect, analysis of band spectra of diatomic molecules, absorption spectra, Raman spectra, and photographic photometry. 1 three-hour laboratory period. Ch'en.

Ph 578, 579, 580. **Solid State Physics.** 3 hours each term.

Crystallography; thermal, electrical, optical, and magnetic properties of solids; band theory; metals, semiconductors, and insulators; defects in solids. 3 lectures. Prerequisite: Ph 471, 472, 473 or equivalent. Mahan.

Ph 593, 594, 595. **Statistical Physics.** 3 hours each term.

Thermodynamics, statistical mechanics, kinetic theory; applications to gases, liquids, solids, atoms, molecules, and the structure of matter. Offered alternate years. Wannier.

Political Science

Professors: R. E. AGGER, J. C. DAVIES, A. S. FLEMMING, J. F. GANGE, DANIEL GOLDRICH, THOMAS HOVET, JR., W. C. MITCHELL, C. P. SCHLEICHER, L. G. SELIGMAN, L. H. ZEIGLER.

Associate Professors: J. R. KLONOSKI (department head), J. R. FIZSMAN.*

Assistant Professors: J. M. ALLMAN, PETER BECHTOLD, D. J. FINLAY,* A. M. HANHARDT, JR., JOYCE M. MITCHELL, J. M. ORBELL, L. C. PIERCE, W. P. SHIVELY, M. G. ZANINOVICH.

* On leave of absence 1967-68.

Instructor: ROBERTA KOPLIN.

Assistants: A. A. ABDI, M. A. BAER, B. H. BARLOW, G. K. BERTSCH, P. M. BULLARD, JR., T. L. CHANDLER, D. E. CRAWFORD, H. W. CUMMINS, W. A. DIXON, WAYNE FAWBUSH, M. N. FOISY, E. N. GONZALES, J. B. JENKINS, K. F. JOHNSON, M. R. KING, HWASOO LEE, DAVID NACHMIAS, J. S. OLEXA, R. B. PRATT, R. A. SEWARD, BARBARA SMITH, R. E. SMITH, H. J. STEVESON, M. P. SULLIVAN, HENDRICK VAN DALEN.

THE UNDERGRADUATE PROGRAM in political science is designed: (1) to provide a systematic understanding of the political process; (2) to provide a basic background to students preparing for careers in government, law, journalism, and the teaching of social studies; (3) to prepare students for graduate work leading to professional careers in political science.

At the lower-division level, the department offers three terms of work in American governmental politics (PS 100, PS 202, 203), with an alternative, for the third term, of international relations (PS 205), and Introduction to Political Science (PS 100, PS 207, 208), a sequence more concerned with basic concepts and methods. Upon completion of PS 100, nonmajors continue with PS 202, PS 203, or PS 205; prospective majors take the second and third terms of Introduction to Political Science (PS 207 and 208).

The advanced courses offered by the department fall into three groups—(1) Political theory and method: PS 311; PS 430, PS 431, PS 432; PS 433, 434, 435; PS 456, 457; PS 470; PS 492, 493. (2) Comparative politics: PS 312; PS 337, 338, 339; PS 351; PS 412, 413; PS 414, 415, 416; PS 424, PS 425, PS 426, PS 427, PS 428; PS 460, 461; PS 463, 464; PS 467, 468, 469; PS 475; PS 482; PS 483; PS 484, 485, 486; PS 488, 489; PS 490, 491; PS 494, 495, 496. (3) International relations: PS 320, 321, PS 322; PS 420, 421; PS 422; PS 440, 441, 442.

Undergraduate majors in political science build their programs on a base of a minimum of 9 term hours of lower-division courses in political science or Introduction to Social Science (Honors College) (SSc 201, 202, 203). Introduction to Political Analysis (PS 311), Introduction to Comparative Politics (PS 312), or one term of World Politics (PS 320), and two additional terms of work in political theory are required of all majors. Courses presented in satisfaction of the minimum 36-hour major requirement must be completed with a grade average of C or better.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in political science must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in political science required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the political science faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Master's Degree. Normally, full-time advanced study for one calendar year beyond the bachelor's degree will prepare a student for the final comprehensive written examination for the master's degree. A thesis is optional.

Doctor's Degree. Full-time study for two years beyond the bachelor's degree is normally required in preparation for the preliminary comprehensive examination for the Ph.D. degree. During these years the student is expected to take regular courses, seminars, and reading courses to prepare himself for the examination. After satisfaction of the language and mathematics or statistics requirements and the preliminary examination, the student is expected to write a thesis. For advanced studies in political science, graduate students may draw upon the resources of the Center for Advanced Study of Educational Administration, the Institute for Comparative Experimental Research on Behavioral Systems, and the Institute of International Studies and Overseas Administration.

LOWER-DIVISION COURSES

PS 100. American Governments: Concepts and Institutions. 3 hours.

Introduction to the concepts of American government, including Federalism, and separation of powers; its institutions, including the Presidency, Congress, and the Supreme Court. Klonoski, Allman, staff.

PS 202. American Governments. 3 hours.

Consideration of the politics and policies of American national government, utilizing the concepts and understandings of modern political science. Klonoski, staff.

PS 203. American Governments. 3 hours spring.

Introduction to American state and local government with emphasis on comparative political behavior in states and communities. Zeigler, staff.

PS 205. International Relations. 3 hours.

An introduction to the intellectual tools for the analysis of relations among nations; the nature of international relations. Finlay.

PS 207, 208. Introduction to Political Science. 3 hours each term.

What political science is about: its basic concerns, fields, and methods of study. J. Allman, staff.

UPPER-DIVISION COURSES

PS 311. Introduction to Political Analysis. 3 hours fall.

Theoretical analysis of political action and systems, their nature, types, and functioning. Particular attention is paid to certain processes of action, including political socialization, the distribution of benefits and costs, integration and stability. Required of majors. J. Mitchell.

PS 312. Introduction to Comparative Politics. 3 hours, winter or spring.

Analysis of major concepts and approaches in the study of comparative government and politics. PS 312 or PS 320 required of majors. Hanhardt.

PS 320, 321. World Politics. 3 hours each term, fall and winter.

Systematic analysis of the nature of international society, and of the motivating and conditioning factors which explain interaction among states and other international entities. PS 312 or PS 320 required of majors. Schleicher.

PS 322. American Foreign Policy. 3 hours spring.

Contemporary foreign relations of the United States; objectives, world and domestic factors affecting American foreign policy, governmental institutions concerned with development and execution of foreign policy, major issues and problems. Schleicher.

PS 337, 338, 339. Southern Asia in Modern Times. 3 hours each term.

The political forces, institutions, and international relations of the independent countries extending from Pakistan to the Philippines; emphasis on common problems and trends. Schleicher.

PS 340. Introduction to Public Policy. 3 hours.

An introduction to policy making as it reflects the sources and means of effective political action, the political resources and patterns of power in the

society. Questions of initiation and change, interest-group patterns, and modes of policy resolution are compared in various policy areas. J. Mitchell.

PS 351. Introduction to Public Administration. 3 hours, fall.

Examination of various approaches to and conceptions of public administration; application of various theories of administration to the study of public organizations; substantive problems of organizations; structure and internal administration; personnel and finance.

PS 391, 392, 393. Far East in Modern Times. 3 hours each term.

Political, economic, and diplomatic history of China, Japan, and Korea, with some attention to Asiatic Russia and the Philippines, from the middle of the nineteenth century to the present. Dull, Falconeri.

PS 403. Thesis. Hours to be arranged.

PS 405. Reading and Conference. Hours to be arranged.

PS 407. Seminar. Hours to be arranged.

Field Studies in Public Administration.

Politics of Public Administration.

Politics of Developing Nations. Goldrich.

Studies in the Judicial Process. Klonoski.

Comparative Authoritarianism. Bechtold.

Community Politics. Agger.

Political Participation. Orbell.

Policy Analysis. J. Mitchell.

Western European Politics. Shively.

Vietnam. Allman, Gange, Schleicher.

Marxist Political Theory. Zaninovich.

Premodern Thought. Zaninovich.

Philosophy of Political Inquiry. Zaninovich.

Communications and Perception. Zeigler.

Politics of the Middle East. Bechtold.

Political Organization. Zeigler.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

PS 412, 413. Administrative Organization and Behavior. (G) 3 hours each term, winter and spring.

Theories of bureaucratic organization analyzed in different contexts; organizational theory considered, including small groups, the nature of authority, and decision making; research findings from several social sciences brought to bear; implications of large-scale organization for the individual reviewed in an attempt to understand the kinds of accommodations individuals make to complex structures. Pierce.

PS 414, 415, 416. Political Parties and Public Opinion. (G) 3 or 4 hours each term.

Analysis of the structure and functions of political parties and public opinion to provide an understanding of the broad area of politics in various contexts and of the critical role of politics in society; the interrelationship of generalization and political experience. Seligman.

PS 420, 421. International Organization. (G) 3 hours each term, fall and winter.

The organization of interaction among nations; institutional structures, patterns of communications, processes of collaboration and integration; special attention to the United Nations and to problems arising from the UN system. Hovet.

PS 422. International Law. (G) 3 hours spring.

Introduction to international public law as an aspect of international organization; international law and the political process; the International Court of Justice. Hovet.

PS 424. Government and Politics of Great Britain. (G) 3 hours.

Governmental institutions and political processes in Great Britain.

- PS 425. **Government and Politics of France.** (G) 3 hours.
Governmental institutions and political processes in France.
- PS 426. **Government and Politics of Germany.** (G) 3 hours.
Governmental institutions and political processes in Germany. Hanhardt.
- PS 427, 428. **Government and Politics of the Soviet Union.** (G) 3 hours each term, fall and winter.
Governmental institutions and political processes in the Soviet Union. Fiszman.
- PS 430. **Political Theory: General.** (G) 3-4 hours fall.
Various approaches suggested by selected political theorists, past and present; problem of knowledge as it relates to politics for practitioner and scientist; various modes of transmitting ideas about the nature of political experience; relation between political knowledge and political activity. Zaninovich.
- PS 431. **Political Theory: Nature, Community, and Authority.** (G) 3-4 hours winter.
Assumptions about man's nature and their implications for development of political theories; growth and character of associative experience and how this conditions the nature of political order; problems and methods of legitimation and transforming of unstructured power into prescribed authority; range of institutional forms resulting from different conceptions of the authority system. Zaninovich.
- PS 432. **Political Theory: Participation, Change, and Leadership.** (G) 3-4 hours spring.
Function of participation with respect to problems of political order; various theories of citizenship, freedom, and obligation that relate to this; causes and sources of socio-political dynamics with special focus upon problems of continuity and radical change; nature of political leadership and its role in both change and stability; function of operative ideals in the structure of political order. Zaninovich.
- PS 433, 434, 435. **Political Theory: The American Tradition.** (G) 3 hours each term.
The development of American thought about government and its proper relation to life, liberty, and property.
- PS 440, 441, 442. **Foreign Policies of the Major Powers.** (G) 3 hours each term.
A systematic and comparative study of the foreign policies of the major world powers, in the light of the general world situation and the internal geographical, social, and institutional situations of each country. Hovet.
- PS 456, 457. **Theory of Democracy.** (G) 3 hours each term.
The internal functioning of democracy as a type of political system; social, economic, and psychological conditions which affect its development and maintenance. W. Mitchell.
- PS 460, 461. **Government and Politics of the Far East: China.** (G) 3 hours each term.
The political organization of modern China and the political behavior of significant groups and elites within Communist China. The historical and ideological background, revolutions, the problems facing the present regime, the relationships with other Communist states. Special emphasis on the treatment of various classes and groups in terms of ideology as well as political practice.
- PS 463, 464. **Government and Politics of Latin America.** (G) 3 hours each term.
Scope of government, regimes and power structures, political ideologies of dominant and aspiring leadership groups, and external sources of influence in Latin America; sources of stability and instability in Latin American politics.
- PS 467, 468, 469. **Federal Public Administration.** (G) 3 hours each term.
Evolution of the Presidency, the executive departments, and various inde-

pendent agencies in the United States government; emphasis on the manner in which the President and his aides exercise their leadership and management responsibilities; analysis of the strengths and weaknesses of the system; proposals for change; relationships between the President and Congress, and the President and the departments. Kieffer.

PS 470. Political Behavior. (G) 3 hours.

Political behavior of individuals examined in the light of psychological and sociological theory; types of political institutions and kinds of government adapted to the needs and behavioral tendencies of people living in modern industrial and technological society. Davies.

PS 475. Political Revolution. (G) 3 hours.

Analysis of causes of revolution, using historical, psychological, and sociological data to explain how violent changes in political power come about. Analysis of specific past revolutions in the search for common phenomena and general theory. PS 470 recommended as background. Davies.

PS 482. Legislative Politics. (G) 3 hours.

The study of legislative operations in various governmental settings; their functions and exercises of power, composition, decision making, and influence in the political system. J. Mitchell.

PS 483. Allocation of Justice. (G) 3 hours.

Study of the nature of justice and how it is administered by police, lawyers, district attorneys, juries, and judges. Klonoski.

PS 484, 485, 486. The Supreme Court in American Government. (G) 3 hours each term.

The judicial process analyzed with primary emphasis on policies and politics of the Supreme Court of the United States. Klonoski.

PS 488, 489. The Policy Process. (G) 3 hours each term.

Systematic study of the factors involved in policy making. Sources of demands, nature of decisions, problems of effectuation, and political consequences compared in various policy areas. J. Mitchell.

PS 490, 491. Community Politics. (G) 3 hours each term, winter and spring.

Systematic treatment of concepts, theories, and findings in studies of small, medium, and large communities as political systems, with emphasis on American communities.

PS 492, 493. Political Decision Making. (G) 3 hours each term.

The process of agreeing upon a course of group action; stages in the decision-making process, from individual preference formation through political participation to conflict resolution; methods of changing outcomes of a political process; special attention to the role of the mass media, power structures, political organizations, mass movements, and periods of crisis, as they effect changes in the decision-making process.

PS 494. Federal Education Policy. (G) 3 hours.

Factors in the development of education policy, with particular reference to the Federal government. Flemming.

PS 495. Federal Welfare Policy. (G) 3 hours.

Factors in the development of health and welfare policy, with particular reference to the Federal government. Flemming.

PS 496. National Security Policy. (G) 3 hours.

Factors in the development of national security policy, with special emphasis upon decision making, and the implications and consequences of such policies here and abroad. Flemming, J. Mitchell.

GRADUATE COURSES

*PS 501. **Research.** Hours to be arranged.

*PS 503. **Thesis.** Hours to be arranged.

* No-grade course.

PS 505. **Reading and Conference.** Hours to be arranged.

PS 507. **Seminar.** Hours to be arranged.

Africa. Finlay.

Comparative Communist Systems. Fiszman.

Comparative Community Politics. Agger, Goldrich.

Comparative Labor Movements. Fiszman.

Comparative Political Elites. Seligman.

Constitutional Law and the Judicial Process. Klonoski

Contemporary Political Theory. W. Mitchell.

International Politics. Schleicher.

International Relations Theory. Hovet, Finlay.

Politics of Public Administration.

Policy Implementation Abroad. Gange.

Political Behavior. Davies.

Political Development in the Newer Nations. Goldrich.

Political Revolution. Davies.

Scope and Methods of Political Science. Shively.

United States Foreign Policy. Schleicher.

Marxist Political Theory. Zaninovich.

Premodern Thought. Zaninovich.

Philosophy of Political Inquiry. Zaninovich.

Communication and Perception. Zeigler.

Political Organization. Zeigler.

Comparative Political Recruitment. Seligman.

Politics of the Middle East. Bechtold.

Western European Politics. Shively.

Orientation to Political Science. Seligman.

Comparative Authoritarianism. Bechtold.

Political Fiction: Novels and Other Writings. Davies.

Introduction to Comparative Politics. Hanhardt.

International Organization. Hovet.

Policy Analysis. J. Mitchell.

Metropolitan Politics. Orbell.

Political Participation. Orbell.

Psychology

Professors: R. A. LITTMAN (department head), FRED ATTNEAVE, JACOB BECK, R. F. FAGOT (associate department head), F. R. FOSMIRE, RAY HYMAN,* F. H. KANFER, R. W. LEEPER, G. R. PATTERSON, PHILIP RUNKEL, N. D. SUNDBERG, LEONA E. TYLER, R. L. WEISS, R. C. ZILLER.

Associate Professors: J. S. CARLSON, H. R. CROSLAND (emeritus), R. M. DAWES, R. B. ELLSWORTH, L. R. GOLDBERG, MARVIN GREENBAUM, D. P. KIMBLE, R. W. LEARY, P. M. LEWINSOHN, EDWARD LICHTENSTEIN, J. S. PHILLIPS, M. I. POSNER.

Assistant Professors: J. W. ADKINS, B. F. ANDERSON, J. C. FENTRESS, R. W. HALLER, R. O. JOHNSON, M. E. LICKEY, JANET P. MOURSUND, G. M. REICHER, BENSON SCHAEFFER, W. C. SHEPPARD.

Assistants: J. S. BOIES, W. E. EICHELMAN, NANCY A. FROST, R. R. FROST, C. J. GADWAY, LYNN F. GOLDBING, DALIA GOLDSCHMIDT, D. P. GOSTNELL, MOHAMMAD HAMID, JEANNETTE P. HANBY, P. R. HARLEY, W. C. HOLLAND, M. H. HUGHES, SANDRA L. JOHANSSON, JACOB KIND, G. J. LAABS, DANIEL LANGMEYER, R. E. LEHMAN, R. T. MARTELL, R. K. OLSON, ROBERTA S. RAY, G. H. ROID, S. L. SATUREN, JEANETTE M. SILVEIRA, C. H. STEWART, MANARD STEWART, R. W. TALBOTT, R. L. TAYLOR, BARBARA L. THOMPSON, D. A. TRUE, J. M. WAHL, R. J. WALLACE, R. E. WARREN, L. N. WHITE.

THE UNDERGRADUATE COURSES in psychology offered by the University are designed to serve several different objectives: to provide a sound basis

* On sabbatical leave, 1967-68.

for later professional or graduate training in psychology; to satisfy the needs of students, majors and nonmajors, who are interested in psychology primarily as a part of a broad liberal education; and to provide a background in psychological principles and techniques as intellectual tools for work in other social and biological sciences and in such professional fields as education, business, law, and journalism.

Lower-Division Program. The lower-division courses are intended to facilitate the several objectives of the psychology curriculum. The six lecture courses at the lower-division level are offered in pairs: fall, Psy 211, Psy 212; winter, Psy 214, Psy 215; spring, Psy 217, Psy 218. For a general introduction to psychology or for preparation for advanced courses, a student should take one of the courses in each pair in sequence. Psychology Laboratory is integrated with the two paired lecture courses offered each term: Psy 213 with Psy 211, Psy 212; Psy 216 with Psy 214, Psy 215; and Psy 219 with Psy 217, Psy 218. Sophomore standing is required to enroll in these introductory sequences.

For satisfaction of the social science or science group requirement, a student must elect a sequence including one of the two paired lecture courses offered each term. To satisfy the science group requirement, the student must also take the related laboratory courses. (A student may take a lower-division sequence in psychology to satisfy the social science or the science group requirement, but not both.)

Any one of the several patterns will ordinarily provide adequate preparation for upper-division courses in psychology. Students should consult their advisers in making their selections from the paired offerings each term.

Major Requirements. The following are the requirements for an undergraduate major in psychology:

(1) Any three of the lower-division lecture courses in psychology. (Students must note, however, that not all of such combinations may be taken for the satisfaction of the group requirement.)

(2) Either the lower-division laboratory sequence (Psy 213, 216, 219) or an upper-division laboratory course (Psy 471, Psy 491, or Psy 493).

(3) Quantitative Methods in Psychology (Psy 313), or Elements of Statistical Method (Mth 425), or Introduction to Statistical Theory (Mth 441), or equivalent. (This requirement is effective for students completing their undergraduate work in June 1970.)

(4) A year sequence from *each* of the following two sets of departments: (a) Anthropology, Economics, Philosophy, Political Science, Sociology; (b) Biology, Chemistry, Mathematics, Physics. (This requirement is effective for students completing their undergraduate work in June 1971.)

(5) A minimum of 36 term hours in psychology, including 24 upper-division hours, (not less than 12 of the required upper-division work must be taken at the University of Oregon, unless exception is granted by the department). A maximum of 6 hours in Mth 425, 426 or Mth 441, 442 may be included in the 24 upper-division requirement if Mth 425 or Mth 441 has been selected to satisfy requirement (3) above.

(6) A minimum grade-point average of 2.00 in all psychology courses and courses from other departments credited toward major work in psychology. A minimum of 36 of such credits must be taken on a graded basis, except that up to 6 credits from Psy 401, Psy 403, and Psy 405 may be taken on a pass-no pass basis. Graded courses must include those specified in requirements (2) and (3) above.

Students who do not plan to take graduate work in psychology may arrange a program of courses which will contribute to a career in teaching, social service, or other professions. Such a program should be planned in consultation with the Department of Psychology.

Honors. See HONORS COLLEGE, pages 130 ff.

Preparation for Graduate Study. A bachelor's degree is seldom a sufficient qualification for professional work in psychology; even the simpler professional positions require at least a master's degree.

Students should not undertake graduate work unless their grades in undergraduate psychology and related courses have averaged better than B.

Prospective graduate students in psychology are advised to take only the minimum of 36 hours in psychology required for an undergraduate major (a suggested maximum is 42 hours)—leaving time for work in such related fields as anthropology, biology, chemistry, mathematics, physics, and sociology. Preparation for graduate work should include courses in quantitative methods and foreign languages. All prospective graduate students should take at least one upper-division laboratory course and are strongly urged to take at least two terms of statistics in the Department of Mathematics. A student who intends to work for a Ph.D. degree should acquire a reading knowledge of two foreign languages; languages with particular relevance for psychologists are German, French, Russian, and Japanese.

Graduate Work. The department offers graduate work leading to the degrees of Master of Arts, Master of Science, and Doctor of Philosophy. Candidates for graduate work are accepted in the following fields: General experimental, physiological and comparative, mathematical, clinical, developmental, social and personality, and assessment. The department maintains a general experimental laboratory, rat and monkey laboratories, a child-study center, and a psychological clinic.

All students beginning graduate work in psychology, regardless of prior graduate training, are required to take a series of core courses (Psy 510—Psy 521, below) which provide a breadth of background in psychology as well as an introduction to research. A thesis is required for all advanced degrees. Teaching and research experience is required of all students working toward the Ph.D. degree. Further information concerning the core program and other requirements may be obtained on request to the department. For general regulations governing graduate work at the University, see GRADUATE SCHOOL, pages 113 ff.

All students applying for admission for graduate work in psychology must provide scores on the Graduate Record Examination, including psychology, verbal, and quantitative scores (the score on the Miller Analogies Test is also desirable) and three letters of recommendation on special forms provided by the department. Detailed information on admission, including application forms and information on awards and assistantships, may be obtained from the Department of Psychology.

Clinical Program. A research-oriented approach to theories and methods of clinical psychology is followed by the Department of Psychology. A clinical psychologist, in the view of the department, is a behavioral scientist with an area of specialization in clinical psychology. As part of his graduate training, the student learns to devise approaches to clinical problems which lead to a better conceptual understanding of the phenomena under study. The program stresses a data-oriented approach to the complexities of clinical problems. During the first and second years of graduate study the student completes (1) the core program, including work in experimental psychology and quantitative methods, (2) a proseminar in clinical research topics, and (3) a clinical core sequence in assessment and in behavior change, with an associated practicum. The second-year practicum experience, as well as advanced-level clinical-research training is provided in large part through the University Psychology Clinic, a training clinic operated by the clinical staff and students.

Beyond the second year, there is considerable latitude in planning a program of study and research. The student must pass a major clinical preliminary examination (covering assessment, psychopathology, and behavior change) and a minor preliminary examination in an area selected by the student as a special interest

(e.g., learning approaches to behavior change, social psychology, etc.). A one-year clinical internship, which may be taken in either the third or fourth year, is required to provide the necessary breadth of experience.

LOWER-DIVISION COURSES

Psy 211. Learning and Thinking. 3 hours fall.

An introduction to the principles underlying the acquisition, retention, and utilization of information and behavior. Anderson, Leeper, Littman, Posner.

Psy 212. Perception. 3 hours fall.

Introduction to principles and evidence concerning the way in which we sense and perceive the world around us. Attneave, Beck, Leeper.

Psy 213. Psychology Laboratory. 1 hour fall.

Introduction to research methods; designed to familiarize the student with scientific approaches to problems in psychology. Integrated with Psy 211 and Psy 212. Psy 213, 216, and 219 must be taken in sequence. Anderson.

Psy 214. Motivation and Physiological Psychology. 3 hours winter.

Introduction to the basic issues concerning the relationship of the brain to behavior. Special emphasis on the role of physiological factors in motivated behavior. Adkins, Kimble, Leary, Lickey, Littman.

Psy 215. Social Psychology. 3 hours winter.

Introduction to social psychology as that part of general psychology concerned with how the individual behaves in relation to his culture. The features of human nature which man shares with other animals and those features which are unique; special attention to the social behavior of animals, to language and communication, and to man's attitude towards social issues. Fosmire, Runkel, Ziller.

Psy 216. Psychology Laboratory. 1 hour winter.

For description, see Psy 213. Integrated with Psy 214 and Psy 215. Psy 213, 216, and 219 must be taken in sequence. Anderson.

Psy 217. Human Development and Individual Differences. 3 hours spring.

An introductory survey of the changes in human behavior throughout the lifespan. Development of psychological processes in man from conception to senescence; emphasis on the origin of individual differences in the areas considered. Littman, Schaeffer, Tyler.

Psy 218. Personality. 3 hours spring.

A general survey of principles in the development, structure, function, and alteration of adult character and personality. Leeper, Lewinsohn, Lichtenstein, Sundberg.

Psy 219. Psychology Laboratory. 1 hour spring.

For description, see Psy 213. Integrated with Psy 217, 218. Psy 213, 216, and 219 must be taken in sequence. Anderson.

UPPER-DIVISION COURSES

Psy 313. Quantitative Methods in Psychology. 4 hours.

Methods which psychologists have devised for summarizing, describing, and interpreting information from field observations, clinical work, interviews, sensory judgments, learning trials, tests, and experiments. Lectures and supervised workshops. Fagot, Hyman, Dawes.

Psy 401. Research. Hours to be arranged.

Psy 403. Thesis. Hours to be arranged.

Open only to students eligible to work for honors.

Psy 405. Reading and Conference. Hours to be arranged.

Open only to students eligible to work for honors.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Psy 407. Seminar. (g) Hours to be arranged.

Opportunity for small groups of students to pursue further the subject matter of an upper-division course or to explore in depth a specific topic arising out of material covered in a course. The seminars offered vary from year to year, depending upon interests and needs of students and upon availability of faculty. Typical offerings are:

Perception. Attneave, Beck.
Thinking. Anderson.
Human Performance. Posner.
Neuropsychology. Kimble, Lickey.
Psychopathology. Fosmire.
Group Processes. Ziller.
Mathematical Models. Fagot, Haller.
Motivation. Adkins.
History and Systems. Leeper.
Primate Behavior. Leary.

Psy 417, 418. Laboratory in Advanced Psychological Statistics. (G) 1 hour each term.

Designed to familiarize the student with the principal applications of statistical methods in psychological research. Emphasis on correlational methods, including partial and multiple correlation, analysis of variance, and design of experiments. Prerequisite: enrollment in Mth 426, 427 or completion of this sequence or equivalent. Fagot.

Psy 420. Introduction to Mathematical Psychology. (G) 3 hours.

Mathematical theory construction in selected areas of psychology; learning, perception, measurement, special psychology, choice behavior. Prerequisite: Mth 425 or equivalent. Haller, Fagot.

Psy 421. Principles and Methods of Psychological Assessment. (g) 3 hours.

Application of psychological methods to the study of the individual; theoretical and statistical rationale of test construction and interpretation; problems involved in the prediction of human behavior; survey of psychological assessment techniques. Prerequisite: Psy 313 or Mth 425, or equivalent. Goldberg.

Psy 426. Thinking. (G) 3 hours.

Learning and use of concepts; problem solving; decision making; cognitive development and creativity. Prerequisite: Psy 211, Psy 490, or consent of instructor. Anderson, Hyman.

Psy 436. Personality. (g) 3 hours.

An intensive study of selected topics in personality theory and related research. Prerequisites: 9 hours in psychology or consent of instructor. Breger, Leeper, Lewinsohn, Lichtenstein, Sundberg.

Psy 437. Social Psychology. (g) 3 hours.

The relationship of the individual to his social environment, especially in his participation in small groups; social perception and motivation as shown in the acquaintance process, power and dependence, roles in the group, and the part played by the group in attitude change. Materials and issues treated in terms of basic psychological concepts. Fosmire, Runkel, Ziller.

Psy 439. Group Consultation. (G) 3 hours.

A laboratory course in the study, evaluation, and modification of group processes. Emphasis on conceptualization of problem-solving groups as parts of larger social systems, with particular attention to the analysis of constraints imposed by the larger system. Prerequisite: Psy 437, Soc 430 or Soc 431, or consent of instructor. Fosmire.

Psy 441. Group and Individual Differences. (g) 3 hours.

Basic principles for quantitative assessment of human characteristics; research findings concerning intelligence, achievement, aptitudes, interests, and personality; group differences related to sex, age, social class, race, nation-

ality. Psy 313 or equivalent recommended as preparation for this course. Goldberg.

Psy 449. Occupational Choice and Psychology of Careers. (g) 3 hours.

Theories of occupational choice and their importance for the theory of counseling; factors related to vocational development and the patterning of careers; sources of vocational information, and its evaluation and uses in educational counseling situations. Sundberg, Tyler.

Psy 450. Abnormal Psychology. (g) 3 hours.

Various forms of unusual behavior, including anxiety states, hysteria, hypnotic phenomena, and psychoses. Normal motives and adjustments considered in their exaggerations in the so-called neurotic person. Psy 313 is recommended as preparation for this course. Fosmire, Lewinsohn, Lichtenstein.

Psy 451. Physiological Psychology. (g) 3 hours.

Study of relationships between nervous system functions and behavior. Emphasis on neuropsychological analysis of stimulus processing, motivation, learning. Adkins, Kimble, Lickey.

Psy 460. Developmental Psychology. (g) 3 hours.

Study of the development of behavior and psychological activity through the prenatal period, infancy, childhood, adolescence. Topics include development of language and cognition, socialization, emotional development, and the development of motor capabilities. Emphasis on social influences. Littman, Schaeffer, Sheppard.

Psy 465. Motivation. (g) 3 hours.

Conceptions of motivation; human and animal research on instinct, arousal, motivational physiology, learned motives, conflict and stress, and organization of dispositions. Adkins, Leeper, Littman.

Psy 470. Animal Psychology. (g) 3 hours.

Survey of learning, motivation, and perception in selected species of animals; phylogenetic comparison and the modern viewpoint. Concurrent enrollment in Psy 471 normally required. Adkins, Kimble, Leary.

Psy 471. Laboratory in Animal Psychology. (g) 2 hours.

Laboratory experience with rats and monkeys. Prerequisite: Psy 313. Adkins, Kimble, Leary.

Psy 490. Psychology of Learning. (g) 3 hours.

Survey of fundamental concepts of conditioning, rote learning, discrimination, problem solving, memory, and motor skill. Theory and experimental literature. Psy 313 strongly recommended as preparation for this course. Anderson, Posner, Reicher, Sheppard.

Psy 491. Laboratory in Learning. (g) 2 hours.

Laboratory work in design, conduct, and analysis of experiments in learning. Prerequisite: Psy 313. Adkins, Posner, Reicher.

Psy 492. Psychology of Perception. (g) 3 hours.

Survey of fundamental concepts of vision, audition, somesthesia, etc. Psychophysiological factors and psychophysical methodology. Psy 313 strongly recommended as preparation. Attneave, Beck.

Psy 493. Laboratory in Perception. (g) 2 hours.

Laboratory work in design, conduct, and analysis of experiments in perception. Prerequisite: Psy 313. Attneave, Beck.

Psy 494. Human Performance. (g) 3 hours.

A unified approach to the complexities of skilled human performance. This capacities which man brings to the performance of motor and intellectual skills; limitations in human ability to sense, perceive, store, and transmit information; experimental analysis of the flow of information within the human nervous system; applications of performance principles to the study of man-machine systems. Posner.

GRADUATE COURSES

- *Psy 501. **Research.** Hours to be arranged.
- *Psy 502. **Advanced Psychology Laboratory.** Hours to be arranged.
- *Psy 503. **Thesis.** Hours to be arranged.
- *Psy 505. **Reading and Conference.** Hours to be arranged.
Topics vary from year to year.
- Psy 507. **Seminar.** Hours to be arranged.
Seminars offered vary from year to year, depending on faculty interests.
Typical offerings are:
Human Performance. Posner.
Neural Basis of Learning. Lickey.
Theories of Choice Behavior. Fagot.
Inferential Processes in Perception. Beck.
Physiological Models in Motivation. Adkins.
Learning Theory Approaches to Psychopathology. Schaeffer.
Behavior Modification. Weiss, Sheppard.
Group Psychotherapy. Clinical Staff.
Milieu Therapy. Clinical Staff.
Mathematical Models. Haller.
Computer Simulation. Haller.
Animal Behavior. Fentress.
Memory. Reicher.
Physiological Basis of Perception. Attneave, Kimble.
Anatomy of Memory. Kimble, Posner.
Clinical Proseminar. Clinical staff.
- Psy 508. **Clinical Work with Children.** 3 hours any term.
Practicum work with autistic children and selected cases of deviant child behavior. Prerequisite: consent of instructor. Schaeffer and clinical staff.
- Psy 509. **Practicum Experience.** 3 hours.
Supervised work in assessment and treatment coordinated with didactic clinical core courses. Prerequisite: consent of instructor.
- Psy 511, 512, 513. **Statistical and Quantitative Methods in Psychology.** 3 hours each term.
Application of basic concepts of probability and statistics to psychological problems. Use of probability theory in psychological theory construction; application of multivariate methods; design of experiments in psychology. Prerequisite: Mth 425 or equivalent. Dawes, Fagot, Hyman.
- Psy 514. **Learning.** 3 hours.
The capacities and functions involved in learning, storage, retrieval, and transformation of information in a variety of experimental situations. Discussion involves studies of classical and instrumental learning, skill learning, short- and long-term memory, classification and rule learning, problem solving, and language behavior. Prerequisite: Basic knowledge of experimental psychology, consent of instructor. Anderson, Littman, Posner.
- Psy 515. **Perception.** 3 hours.
Factual knowledge and theory concerning sensory function and perceptual information processing. Attneave, Beck.
- Psy 516. **Physiological Psychology.** 3 hours.
A survey of the fundamental aspects of brain-behavior relationships. Neuron physiology, sensory systems, nonspecific afferent systems; emotion, motivation, and learning from neurophysiological viewpoint. Lectures and discussion. Kimble, Adkins, Lickey.
- Psy 517. **Social Psychology.** 3 hours.
Current theory and research concerning the individual within a social context. Runkel, Ziller.

Psy 518. Developmental Psychology. 3 hours.

Study of the development of the child's behavior and judgment from infancy to early adolescence. Topics include the development of conceptual ability, language, affectional and social behavior, aggression, imitation, and morality. Emphasis on cognitive development viewed from both learning theory and Piagetian frameworks. Shaeffer.

Psy 519. Personality. 3 hours.

Critical consideration of the main personality theories, particularly those which emphasize current concepts regarding learning, perception, and motivation. Leeper, Weiss.

Psy 520. Psychopathology. 3 hours.

Problems in the definition and measurement of deviant behavior; critical review of research literature on etiology, intervention, and outcome in psychoses, neuroses, and personality disorders. Prerequisite: Psy 450 or consent of the instructor. Fosmire, Lewinsohn, Lichtenstein.

Psy 521. History and Systems of Psychology. 3 hours.

Analysis of selected psychological problems in an historical and methodological perspective. Topics vary from year to year. Leeper, Littman.

Psy 524. Individual Intelligence Testing. 4 hours.

Lectures and supervised practice in the application and interpretation of tests of intelligence and cognitive deficits resulting from brain damage. Prerequisite: consent of instructor. Lewinsohn.

Psy 525. Individual Intelligence Testing. 2 hours.

Advanced individual work in assessment of intellectual and personality capabilities. Prerequisite: consent of instructor.

Psy 527. The Counseling Process. 3 hours.

General orientation to counseling; theories of counseling; settings and roles of counselors; interviewing and the counseling process; tests and assessment; ethics and values. Prerequisite: consent of instructor. Sundberg.

Psy 530, 531, 532. Foundations of Clinical Psychology. 3 hours.

Theories, techniques, and relevant empirical evidence pertaining to verbal individual psychotherapy, behavior modification, milieu therapy, and group therapies. Prerequisite: consent of instructor.

Psy 533. Advanced Personality Assessment. 3 hours.

Principles and practice of psychological assessment. Supervised individual practice in clinic-laboratory; covers intelligence testing, including Wechsler and Stanford-Binet tests, and a variety of personality tests. Goldberg, Lewinsohn, Lichtenstein.

Psy 534. Research in Psychotherapeutic Methods. 3 hours.

Empirical and methodological contributions to the problems of evaluating behavior change in individual psychotherapy; emphasis on process variables affecting behavior change. Lichtenstein, Weiss.

Psy 535. Advanced Social Psychology. 3 hours.

Social behavior in relation to current psychological theory and research. Hyman, Runkel, Ziller.

Psy 536. Experimental Methods in Social Psychology. 3 hours.

A critical analysis of the design and implementation of laboratory experiments concerning social behavior. Hyman, Runkel, Ziller.

Psy 537, 538, 539. Personality Theory and Research. 4 hours fall; 2 hours each term, winter and spring.

Specialized work with particular clinical problems (e.g., depression, self-control, etc.) focusing on the development of testable hypotheses about the phenomena. Students will work in small teams with the clinical staff in an attempt to generate systematic assessment and treatment approaches. Prerequisite: consent of instructor.

Psy 543. Measurement: Theory and Application. 3 hours.

Nature of measurement; logic of measurement; the role of measurement in psychological theory; theory and application of psychological scaling methods. Prerequisite: Psy 510 or equivalent. Fagot.

Psy 544. Choice Behavior. 3 hours.

Measurement and choice behavior; algebraic and probabilistic theories of choice for certain and uncertain outcomes. Prerequisite: Psy 543 and elementary probability theory. Fagot.

Psy 545. Theory and Construction of Tests. 3 hours.

Basic theory of test scores; reliability and validity of tests; methods of standardizing and equating test scores; problems of norms and units; weighting and differential prediction; item analysis. Prerequisite: Mth 426 or equivalent.

Psy 546. Factor Analysis. 3 hours.

Systematic and critical development of the theory of factor analysis; applications in psychology. Prerequisite: Mth 426 or equivalent.

Psy 560. Advanced Physiological Psychology. 3 hours.

Theory of nervous-system function in learning, motivation, and perception. Detailed study of special areas. Kimble, Lickey.

Psy 566. Advanced Psychology of Perception. 3 hours.

Basic problems and phenomena of perception. Attneave, Beck.

Psy 570. Advanced Animal Psychology. 3 hours.

Special topics in animal learning, motivation; and species comparison. Leary.

Psy 572, 573, 574. Advanced Psychology of Learning and Thinking. 3 hours each term.

Detailed study of special topics in learning, thinking and problem solving.

Religious Studies

Professor: P. B. MEANS (emeritus).

Associate Professors: DOUGLAS STRATON (department head), ALFRED BLOOM.

Assistant Professor: STEPHEN C. REYNOLDS.

THE DEPARTMENT OF RELIGIOUS STUDIES is nonsectarian in spirit, the aim being to acquaint students with the far-reaching influence of religion in the cultural history of the world. Its courses are planned in accordance with the same standards of scholarship recognized in other departments of the University.

Through these courses, the University seeks to develop an understanding of the nature and processes of religious thought and experience, and to relate these to the problems of our time. The courses are also intended to meet the needs of students whose major work in other fields fits them for positions of leadership, and who can become effective and influential in the religious and spiritual life of their communities through a better understanding of the power of religion in men's lives and in the destiny of civilization.

LOWER-DIVISION COURSES

***R 201, 202, 203. Great Religions of the World.** 3 hours each term.

Study of the Hindu-Buddhist, Confucian-Taoist, Zoroastrian, Judeo-Christian, and Islamic philosophic and religious systems. Special attention to the philosophy of these religions as shown in their classic scriptures; concluding resumé of their present organization and major sectarian divergencies;

* Students who have taken R 201, 202, 203 may enroll for R 301 but not for R 302, 303.

analysis of their world views and conceptions of God, man, ethics, human destiny, and salvation. Must be taken in sequence. Straton, Reynolds.

R 224, 225, 226. The Bible and Civilization. 3 hours each term.

Survey of the social and religious history of Israel through the time of Jesus. The growth of ethical and religious ideas, the origin and teachings of major Old and New Testament books; the historical background of Christianity, and the life and teachings of Jesus. Must be taken in sequence. Straton.

CL 231, 232. New Testament Readings. 4 hours each term.

For description, see page 158.

UPPER-DIVISION COURSES

***R 301, 302, 303. Religions of Mankind.** 3 hours each term.

Major living and historical religions of mankind. Fall: primitive religion, the national religions of Egypt, Mesopotamia, Greece and Rome; winter: Oriental religions, including Hinduism, Buddhism, Confucianism, Taoism, and Shinto; spring: Zoroastrianism, Judaism, Christianity, and Islam. Attention to origins, religious ideas, organization, and sacred literature. Bloom.

Eng 306, 307. The Literature of the English Bible. 3 hours each term.

For description, see page 170.

R 321, 322, 323. History of Christian Thought and Institutions. 3 hours each term.

The course of Christian history in East and West; the relations between spirituality, doctrine, and institutional forms. Fall: from the New Testament period to the age of Justinian; winter: the Middle Ages, the schism between East and West, and the reform movement in the West; spring: the Reformation and the modern period. Reynolds.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

R 405. Reading and Conference. (g) Hours to be arranged.

R 407. Seminar. (g) Hours to be arranged.

Buddhist Philosophy in India. Bloom.

Religious Philosophy of China. Bloom.

Religions in Japan. Bloom.

Patristics. Reynolds.

Social Perspectives of American Churches. Bloom.

R 419, 420. Philosophy of Religion. (g) 3 hours each term, fall and winter.

Concepts of reality and human nature within a religious perspective. Fall: major ideas of Deity, patterns of reasoning concerning God as personal being, the problem of evil; winter: idea of man as spiritual, moral, and religious being in the light of other philosophies of man. R 419 prerequisite to R 420. Straton.

R 421. Contemporary Social Problems and Religion. (g) 3 hours spring.

The idea of ethical duty in a religious perspective; the New Testament and ethical problems, the ethics of the family, of race, of the political and economic orders; the concepts of history and human destiny in Judaeo-Christian thought. Straton.

R 422. Psychology of Religion. (g) 3 hours.

Contributions of psychology to the understanding of various forms of religious behavior.

R 423, 424, 425. Contemporary Concepts of God. (g) 3 hours each term.

Contemporary philosophical thought concerning Deity, with special attention to naturalism, idealism, and existentialism; selected readings from representative philosophers of religion such as Dewey, Wieman, Whitehead, Boodin, Royce, Brightman, Underhill, Radhakrishnan, Niebuhr, Tillich, Buber, Maritain, etc. R 423 prerequisite to R 424 and R 425. Straton.

* See page 229, note (*).

Anth 444. **Religion and Magic of Primitives.** (G) 3 hours.

For description, see page 141.

Soc 461. **Sociology of Religion.** (G) 3 hours.

For description, see page 243.

Hst 471. **Social Factors in American History.** (G) 3 hours.

For description, see page 193.

Romance Languages

Professors: D. M. DOUGHERTY (department head), C. B. BEALL, T. R. HART, C. L. JOHNSON, P. J. POWERS, L. O. WRIGHT (emeritus).

Associate Professors: E. S. HATZANTONIS, T. E. MARSHALL,* D. G. SIMONIN.

Assistant Professors: RANDI M. BIRN, R. H. DESROCHES, ELISABETH K. MARLOW, P. W. NOBILE,* S. F. RENDALL, S. L. ROSE, T. J. TOMANEK.

Senior Instructors: H. F. COOPER, D. J. CURLAND.

Instructors: ROBERT ARCHIBALD, PRISCILLA E. BECK, BENEDICT BEIT-ISHOO, JESÚS BERDUGO, G. A. CASAGRANDE, MERCEDES CAYUELA, BETTY-ANN R. COUCHMAN, PIETRO D'ANGELO, ALBERTO DE LA FUENTE, COLETTE M. FREITAG, EDWIN GARDNER, LESLIE MARCUS, L. A. OLIVIER, JR.,* D. P. PARK, GAIL M. PURVIS, R. V. SAVAGE.

Lecturers: P. M. LEWIS, ARTURO CAYUELA-MIRÓ.

Assistants: ELIZABETH W. BATES, J. R. BOIS, P. E. BONDANELLA, GLORIA J. CAHAN, ANDRIA J. CHIDO, JULIA M. CONAWAY, ROSA S. CORTÉS, ANNA-MARIE S. DENES, ELIZABETH R. EDMONSTON, MARIA T. FAVERO, JANICE F. GERVAIS, G. S. GIAUQUE, A. M. HERRERA, REITA M. HRIERNICK, F. H. KATO, JERRY A. LAND, F. R. RIVERA, HARRIET T. SATURNEN, MAGDEL T. SCHENK,† JOSÉ-MIGUEL SOBRÉ, C. C. STATHATOS, JOAN C. THIELEMAN, MARY L. WAGNER.

THE DEPARTMENT OF ROMANCE LANGUAGES offers instruction in French, Italian, Portuguese, and Spanish languages and literatures at both undergraduate and graduate levels. Programs leading to undergraduate majors are provided in French, Italian, and Spanish. In each of these languages considerable attention is given to exercises in speaking, understanding, and writing the modern idiom. A fully equipped language laboratory affords ample opportunity for practice in speaking and understanding, through the use of tapes and recordings made by native speakers.

Major Requirements. Major requirements for the Bachelor of Arts degree are as follows:

French, Italian, or Spanish. Thirty term hours beyond the second-year sequence—normally the survey of literature, intermediate composition and conversation, and two additional upper-division year sequences, of which one must be in literature.

Romance Languages. Thirty term hours beyond the second-year sequence in one language and 15 term hours beyond the second-year sequence in a second language, including two upper-division sequences in literature in the first language and one in the second.

Secondary-School Teaching of Foreign Languages. For certification as a teacher of French or Spanish in Oregon high schools, the Oregon State Depart-

* On leave of absence 1967-68.

† Resigned, Dec. 15, 1967.

ment of Education requires (1) the completion of 45 term hours of subject preparation, (2) the completion of Human Development (Ed 315), Methods (Ed 408) (6 hours), and Student Teaching (Ed 416 or Ed 417), and (3) the recommendation of the institution at which the student completes his subject preparation.

The Department of Romance Languages approves enrollment for student teaching only for those students whose course work in the language that they plan to teach is of high quality and who have attained reasonable oral and written control of this language.

For standard certification, after a fifth year of preparation, the student must complete an additional fifteen term hours in linguistics, culture and civilization, and phonetics. The following courses are recommended: French: RL 331, 332, RL 429, 430; Spanish: RL 350, 351, RL 432, 433; for candidates in both languages: AL 450, 451 or Anth 441. Candidates for standard certification must also complete 15 additional term hours in education; specific requirements should be requested from the Division of Teacher Education.

It is recommended that, if possible, the student complete the five-year program for permanent certification before he begins teaching, and that, during the fifth year, he satisfy the requirements for the interdisciplinary master's degree in teaching. (See pages 118-119.)

For further information, the student should consult the chairman of the departmental Committee on Teacher Training, Mr. David Curland.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. The Department of Romance Languages offers programs of study leading to the degree of Master of Arts in French, Spanish, and Romance Languages, and to the degree of Doctor of Philosophy in Romance Languages and Comparative Literature. For the master's degree, courses are offered in the languages and literatures of France, Italy, Spain, and Latin America; the student's program may include work in two of these fields. The minimum requirement for this degree is the completion of 45 term hours of graduate study with grades of B or higher.

Major fields for the doctoral programs are French and Hispanic languages and literatures, supplemented by offerings in Italian and Portuguese. The doctoral program must include work in a minor field and a year sequence in philology. Students interested in graduate study should consult the head of the department concerning departmental requirements.

The graduate program in Comparative literature is administered by a committee representing the departments of English, German and Russian, and Romance Languages; it offers opportunity for advanced study of several literatures in their original languages. (See Comparative Literature, pages 161-162, ff.).

The resources of the University Library for research in French, Italian, and Spanish are fully adequate for the department's graduate programs; in some fields they are outstanding. The Library's holdings of learned periodicals are extensive; the quarterly journal, *COMPARATIVE LITERATURE*, is edited in the department.

French

LOWER-DIVISION COURSES

RL 50, 51, 52. First-Year French. 4 hours each term.

An introduction to French, stressing reading and speaking. Exercises in elementary composition and grammar. G. Purvis, staff.

RL 53, 54. First-Year French. 6 hours each term, winter and spring.

Covers in two terms the work of RL 50, 51, 52. For students who wish to begin French in the winter term. Bondanella.

RL 101, 102, 103. Second-Year French. 4 hours each term.

Study of selections from representative authors; review of grammar; considerable attention to oral use of the language. Special section for Honors College students. Desroches, staff.

UPPER-DIVISION COURSES**RL 301, 302, 303. Survey of French Literature.** 3 hours each term.

French literature from the Middle Ages to the present; readings from representative authors. Three sections conducted in French. Prerequisite: two years of college French or equivalent. Desroches, Johnson, Marlow, Rendall.

RL 314, 315, 316. French Composition and Conversation. 3 hours each term.

Exercises in pronunciation, comprehension, and composition. Ample opportunity for conversation. Conducted in French. Prerequisite: two years of college French or equivalent. Beit-Ishoo, Cooper, Marlow, Rendall.

RL 331, 332, 333. French Pronunciation and Phonetics. 2 hours each term.

A thorough study of the fundamentals of French pronunciation, with personal attention to each student's difficulties. Prerequisite: two years of college French or equivalent. Normally required of French majors and of candidates for teacher certification. Freitag, Purvis.

RL 403. Thesis. Hours to be arranged.**RL 405. Reading and Conference.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****RL 407. Seminar.** (G) Hours to be arranged.**RL 411, 412, 413. Seventeenth-Century French Literature.** (G) 3 hours each term.

Systematic study of the principal movements, types, and writers in seventeenth-century French literature, with special attention to Pascal, Corneille, Molière, and Racine. Prerequisite: Survey of French Literature. D. G. Simonin.

RL 417, 418, 419. Nineteenth-Century French Literature. (G) 3 hours each term.

The masterworks of prose fiction and selected works of the great poets and playwrights of the century. One term devoted to each type. Prerequisite: Survey of French Literature. Johnson.

RL 423, 424, 425. Twentieth-Century French Literature. (G) 3 hours each term.

Study of the writers and dominant literary currents in France since 1900. Readings, lectures, and recitations. Conducted in French. Prerequisite: Survey of French Literature. Birn, Marshall.

RL 429, 430, 431. French Culture and Civilization. (G) 3 hours each term.

The political and social backgrounds of French literature; introduction to French music and art. Prerequisite: RL 301, 302, 303, or RL 314, 315, 316, or equivalent. D. G. Simonin.

RL 435, 436, 437. Eighteenth-Century French Literature. (G) 3 hours each term.

Study of the principal authors of the Enlightenment, particularly in their relationships to European currents of thought; emphasis on Montesquieu, Voltaire, Rousseau, and the Encyclopaedists. Desroches.

RL 467, 468, 469. Advanced French Composition. (G) 2 or 3 hours each term.

Translation of modern literary texts into French, and writing of original themes. Conducted in French. Normally required of French majors and of candidates for teacher certification. Prerequisite: RL 314, 315, 316 or equivalent. Dougherty, Marlow.

GRADUATE COURSES

*RL 503. **Thesis.** Hours to be arranged.

RL 505. **Reading and Conference.** Hours to be arranged.

RL 507. **Seminar.** Hours to be arranged.

RL 517, 518, 519. **Sixteenth-Century French Literature.** 3 hours each term.

A general survey of literature in the Renaissance, with emphasis on Marguerite de Navarre, Rabelais, Marot, Ronsard, Du Bellay, d'Aubigné, and Montaigne. Beall.

RL 538, 539, 540. **Old French Readings.** 2 hours each term.

Study of the principal mediaeval genres; epic, romance, chronicles, lyric poetry, and drama. Special attention to works of fourteenth and fifteenth centuries. Dougherty.

RL 544. **François Villon.** 3 hours.

Study of the entire work of Villon. Dougherty.

RL 545. **Ronsard.** 3 hours.

Study of the evolution of Ronsard's poetic genius, and of his role in acclimating classical and Italian verse in France. Particular attention to style and to characteristic Renaissance themes and motifs. Beall.

RL 546. **Molière.** 3 hours.

Study of the principal comedies of Molière. D. G. Simonin.

RL 547. **Voltaire.** 3 hours.

Study of Voltaire's social satire and historical prose. Beall.

RL 548. **Baudelaire.** 3 hours.

Study of all the works of Baudelaire. Johnson.

RL 549. **Paul Valéry.** 3 hours.

Intensive study of representative works of Paul Valéry. Marshall.

RL 550, 551. **Proust.** 3 hours each term.

Detailed analysis of *A la Recherche du temps perdu*, including ideas, style, and structure. Birn.

Italian

LOWER-DIVISION COURSES

RL 70, 71, 72. **First-Year Italian.** 4 hours each term.

Grammar, pronunciation, composition, and translation of modern authors. Casagrande, staff.

RL 73, 74. **First-Year Italian.** 6 hours each term, winter and spring.

Covers in two terms the work of RL 70, 71, 72.

RL 104, 105, 106. **Second-Year Italian.** 4 hours each term.

Study of selections from representative authors. Composition, pronunciation, grammar. D'Angelo, Hatzantonis.

UPPER-DIVISION COURSES

RL 307, 308, 309. **Survey of Italian Literature.** 3 hours each term.

Survey of Italian literature from the Middle Ages to the present; readings from representative texts. Prerequisite: two years of college Italian or equivalent. Casagrande.

RL 374, 375, 376. **Italian Composition and Conversation.** 3 hours each term.

Instruction in Italian grammar and current idiomatic patterns; extensive exercises in oral communication and written composition. Conducted in Italian. Prerequisite: two years of college Italian or equivalent. Casagrande.

* No-grade course.

RL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

AL 477, 478, 479. **Dante and His Times.** (g) 3 hours each term.

For description, see page 137. Beall.

RL 407. **Seminar.** (G) Hours to be arranged.

RL 480, 481, 482. **Italian Renaissance Literature.** (G) 3 hours each term.

Study of tragedy, comedy, epic, lyric, *novella*, historical and political prose, courtesy books, criticism. Italy's role as the literary teacher of the rest of Renaissance Europe. Beall.

RL 483, 484, 485. **Nineteenth-Century Italian Literature.** (G) 3 hours each term.

Study of selected Italian authors of the romantic and post-romantic movements. Emphasis on works of Foscolo, Manzoni, Leopardi, Verga, De Sanctis, Carducci, and Pascoli. Prerequisite: RL 307, 308, 309 or consent of instructor. Hatzantonis.

RL 486, 487, 488. **Twentieth-Century Italian Literature.** (G) 3 hours each term.

The main trends in criticism, poetry, drama, and the novel, starting respectively with D'Annunzio, Pirandello, and Svevo to the present. Prerequisite: RL 307, 308, 309 or consent of instructor. Hatzantonis.

GRADUATE COURSES

RL 505. **Reading and Conference.** Hours to be arranged.

RL 507. **Seminar.** Hours to be arranged.

Portuguese

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

RL 471, 472, 473. **Portuguese and Brazilian Literature.** (G) 3 hours each term.

Comparative structure of Portuguese. Reading of *contos*, writers of the classical period and of the nineteenth and twentieth centuries, and Brazilian literature. Prerequisite: facility in Spanish, Italian, French, or Latin. Rose.

RL 474, 475, 476. **Brazilian Novel.** (G) 3 hours each term.

An historical and critical study of the Brazilian novel of the nineteenth and twentieth centuries. Prerequisite: a reading knowledge of Portuguese. Rose.

Spanish

LOWER-DIVISION COURSES

RL 60, 61, 62. **First-Year Spanish.** 4 hours each term.

An introduction to Spanish, stressing speaking and reading. Exercises in elementary composition. Curland, staff.

RL 63, 64. **First-Year Spanish.** 6 hours each term, winter and spring.

Covers in two terms the work of RL 60, 61, 62. For students who wish to begin Spanish in the winter term. Land.

RL 107, 108, 109. **Second-Year Spanish.** 4 hours each term.

Intensive oral and written exercises designed to help the student acquire an accurate and fluent use of Spanish. Study of selections from representative authors. Special section for Honors College students. Tomanek, staff.

UPPER-DIVISION COURSES

RL 304, 305, 306. **Survey of Spanish Literature.** 3 hours each term.

Spanish literature from the Middle Ages to the present; readings from representative texts. Prerequisite: two years of college Spanish or equivalent. Beck, Rose.

- RL 347, 348, 349. **Spanish Composition and Conversation.** 3 hours each term.
Fundamentals of pronunciation. Extensive oral and written practice. Conducted in Spanish. Prerequisite: two years of college Spanish. Berdugo, de la Fuente, Savage.
- RL 350, 351. **Spanish Pronunciation and Phonetics.** 2 hours each term.
Scientific study of Spanish sounds, rhythms, and intonation. Supervised practice, with individual use of recording equipment. Normally required of Spanish majors and of candidates for teacher certification. Prerequisite: consent of instructor. Curland.
- RL 403. **Thesis.** Hours to be arranged.
- RL 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- RL 407. **Seminar.** (G) Hours to be arranged.
- RL 432, 433, 434. **Hispanic Culture and Civilization.** (G) 3 hours each term.
Intellectual, cultural, and historical backgrounds of Hispanic literatures. Fall: the mediaeval and Golden Age periods; winter: the eighteenth and nineteenth centuries; spring: the twentieth century. Conducted in Spanish. Prerequisite: RL 304, 305, 306. Offered alternate years. Cayuela-Miró.
- RL 438, 439, 440. **Nineteenth-Century Spanish Literature.** (G) 3 hours each term.
Reading and study of representative works in drama, poetry, and prose from the romantics to the Generation of 1898. Conducted in Spanish. Prerequisite: Survey of Spanish Literature.
- RL 441, 442, 443. **Modern Spanish Literature.** (G) 3 hours each term.
Modern Spanish literature beginning with the Generation of 1898. Principal types and authors. Extensive reading of texts. Conducted in Spanish. Prerequisite: Survey of Spanish Literature. Beck.
- RL 444, 445, 446. **Spanish-American Literature.** (G) 3 hours each term.
Study of the principal authors of Spanish America since the beginning of the sixteenth century. Selections from the works of Ercilla, Sor Juana, Bello, Heredia, Sarmiento, Darío, Silva, Nervo, González Prada, Mistral, and others. Prerequisite: Survey of Spanish Literature. Tomanek.
- RL 451, 452, 453. **Spanish Literature of the Golden Age.** (G) 3 hours each term.
Study of the outstanding authors of Spain's classical period: Garcilaso, Cervantes, Lope de Vega, Calderón, Quevedo, Góngora, and others. Prerequisite: survey of Spanish Literature. Powers.
- RL 461, 462, 463. **Advanced Spanish Composition and Conversation.** (G) 2 or 3 hours each term.
Normally required of Spanish majors and of candidates for teacher certification. Prerequisite: RL 347, 348, 349 or equivalent. Conducted in Spanish. Cayuela-Miró, de la Fuente.

GRADUATE COURSES

- *RL 503. **Thesis.** Hours to be arranged.
- RL 505. **Reading and Conference.** Hours to be arranged.
- RL 507. **Seminar.** Hours to be arranged.
- RL 541, 542, 543. **Old Spanish Readings.** 2 hours each term.
Study of representative texts of the three centuries preceding the Golden Age. Development of the principal genres: the chronicle, the ballad, the romance. Detailed study of *El Libro de Buen Amor*, *El Conde Lucanor*, and *Amadís de Gaula*. Hart.
- RL 554, 555, 556. **Drama of the Golden Age.** 3 hours each term.
Interpretation and criticism of selected *comedias* of Lope de Vega, Calderón,

* No-grade course.

Tirso de Molina, Ruiz de Alarcón, Agustín Moreto, and Rojas Zorilla. Conducted in Spanish. Powers.

RL 557, 558, 559. **The "Modernista" Movement.** 3 hours each term.

Interpretation and criticism of the work of leading Spanish American "modernista" writers: Martí, Silva, Julián del Casal, Gutiérrez Nájera, Darío, Lugones, and others. Tomanek.

RL 561, 562, 563. **Spanish-American Novel.** 3 hours each term.

Study of the novel as a literary form in Spanish America.

RL 564. **The Enlightenment in Spain.** 3 hours fall.

Study of the several genres, especially the essay, in eighteenth-century Spanish literature, with special attention to: Feijóo, Jovellanos, Cadalso, Maléndez Valdés, Forner, Moratín, Torres Villarroel, and the *Fabulistas*.

RL 565. **Realismo.** 3 hours winter.

Study of the realistic and naturalistic novel in the Spanish nineteenth century, with special attention to the works of Benito Pérez Galdós.

RL 566. **Romanticismo y Costumbrismo.** 3 hours spring.

Study of the origins and manifestations of romanticism in Spain and of the tendency known as *costumbrismo*, which coincided with the romantic movement. Special attention to the works of Larra, Mesonero Romanos, and Bécquer.

Romance Philology

GRADUATE COURSES

RL 520, 521, 522. **Old French.** 3 hours each term.

Phonology and morphology. Reading of principal literary monuments. History of French literature through the thirteenth century. Dougherty.

RL 523, 524, 525. **Vulgar Latin and Old Provençal.** 2 hours each term.

RL 535, 536, 537. **Old Spanish.** 3 hours each term.

Phonology, morphology, and syntax of early texts; ecclesiastical glosses, legal documents, *Auto de los Reyes Magos*, the *Roncesvalles* fragment, the *Cantar de Mio Cid*, ancient ballads. Hart.

Sociology

Professors: W. T. MARTIN (department head), HARRY ALPERT,* THEODORE ANDERSON, J. V. BERREMAN, HERBERT BISNO, ROBERT DUBIN, R. A. ELLIS, J. M. FOSKETT, JAY JACKSON, BENTON JOHNSON, R. J. PELLEGRIN,† W. S. ROBINSON.

Associate Professors: T. B. JOHANNIS, JR., KENNETH POLK,* R. H. RODGERS.

Assistant Professors: JOAN ACKER, J. M. ARMER, STEVEN DEUTSCH, RICHARD GALE, J. R. HOWARD, GERALD KING, JOHN MACGREGOR, W. E. SCHAFER.

Instructor: DANIEL HODGES.

Assistants: MARY ADAMS, R. H. ANDERSON, RONALD ARMSTRONG, JIMMY BERRY, JUNE BRINKMAN, C. N. BULL, HEATHER COX, HARROLD CURL, CHARLES DUDLEY, ROGER DURAN, JOE FASHING, GARY FEUERBERG, MARVIN FEUERBERG, DEAN FREASE, JERROLD GROSS, JACK GUDEMAN, JOSEPH HARRY, JAMES HEUSER, MERLIN HOFSTETTER, ROGER IRLE, PAMELA KEDL, JOHN KLEBE, LYLE LARSON, RONALD LITTLE, RICHARD LOFT, JOHN MCCARTHY, LIONEL MALDONADO, ANGELA O'RAND, MARVIN OSTBERG, GURBACHAN PAUL, D. L. POSTON, DALE SPADY, NICO STEHR, KAREN H. STEPHAN, C. M. STUART, HAROLD WEAVER, JOHN WESTINE, ROBERT YOUTZ.

* On leave of absence 1967-68.

† On sabbatical leave 1967-68.

SOCIOLOGY is the analytical study of the development, structure, and function of human groups and societies. It is concerned with the scientific understanding of human behavior as it relates to, and is a consequence of, interaction within groups.

The undergraduate program in sociology at the University is designed: (1) to prepare students for graduate work leading to professional careers in the field; (2) to provide a basic background for those preparing for careers in personnel work, journalism, organizational management, social work and public welfare, city and regional planning, teaching of social studies, and research in human relations; and (3) to provide a scientific basis, in knowledge and understanding, for constructive adult citizenship.

Alpha Kappa Delta, a national sociology honorary society, has a chapter on the University campus; all students who have had at least 15 term hours of work in sociology with a grade-point average of 3.00 or higher and a general scholastic average of 3.00 or higher are eligible for membership.

Interested sophomores and juniors should inquire about the availability of undergraduate research participation fellowships.

Early in their undergraduate years, students interested in graduate work in preparation for careers as professional sociologists should consult an adviser in the department concerning the department's undergraduate preparatory program for research and teaching. Recommendations include: (1) satisfaction of the language requirement for the B.A. degree; (2) a year sequence in mathematics; (3) at least one upper-division year sequence in two of the following fields—anthropology, economics, political science, psychology.

Brochures describing the undergraduate program in sociology are available in the department office on request.

Requirements for Bachelor's Degree. Candidates for the bachelor's degree with a major in sociology must satisfy all general requirements of the University and the College of Liberal Arts and complete the following required courses in sociology:

	Term Hours
General Sociology (Soc 204, 205, 206).....	9
Introduction to Social Research (Soc 311).....	3
Social Psychology (Soc 334).....	3
Development of Sociology (Soc 470).....	3
Any two of the following: American Society (Soc 301), World Population and Social Structure (Soc 303), The Community (Soc 304), Contemporary Social Problems (Soc 305)	6

Majors in sociology are required to complete a minimum of 42 hours in sociology; not more than 54 hours in sociology may be counted toward a bachelor's degree.

A grade-point average of 2.00 or higher in all sociology courses is required for graduation with a major in sociology.

Secondary-School Teaching of Social Studies. For certification as a teacher of social studies in Oregon high schools, The Oregon Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in social studies and the requirements for recommendation by the University of Oregon, a major in sociology must complete the following program, selected from the fields of history, geography, political science, economics, and sociology or anthropology, with a 2.50 GPA or higher: (1) work in sociology required for a major in the field; (2) 27 term hours in history; (3) 9 term hours in a third field; (4) at least one course in each of two additional fields. The program must include a minimum of 36 term hours in upper-division courses.

For further information, the student should consult the member of the sociology faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Areas of Study. The department offers introductory courses in General Sociology (Soc 204, 205, 206) and Principles of Sociology (Soc 300), and specialized upper-division and graduate courses in the following broad areas:

Methodology. Introduction to Social Research (Soc 311); Sociological Research Methods (Soc 411, 412, 413); Theory and Methods in Population and Ecology (Soc 415); Experimental Sociology (Soc 518).

Social Welfare and Social Work. The Social Welfare Institution (Soc 467, 468, 469); Principles and Concepts of Social Work (Soc 425, 426).

Social Psychology. Social Psychology (Soc 334, 335); The Family (Soc 423); Theory of Small Groups (Soc 430); Group Dynamics (Soc 431); Collective Behavior (Soc 436); Social Psychology of the Family (Soc 438); Analytical Problems in Social Psychology (Soc 530); Propaganda and Social Control (Soc 532); Social Movements (Soc 537).

Social Structures and Processes. American Society (Soc 301); Social Organization (Soc 342, 343); World Population and Social Structure (Soc 303); The Community (Soc 304); Contemporary Social Problems (Soc 305); Criminology and Delinquency (Soc 440, 441); Urbanization and the City (Soc 442); Social Control (Soc 443); Social Stratification (Soc 451, 452); Sociology of Race Relations (Soc 445); Sociology of Work (Soc 446); Industrial Sociology (Soc 447); Sociology of Occupations (Soc 448); Social Change (Soc 449); Sociology of Leisure (Soc 490); Analytical Problems in Social Structures and Processes (Soc 540); Theory of Organization (Soc 541); Power and Influence in Society and Community (Soc 542).

Social Institutions. Social Institutions (Soc 460); Sociology of Religion (Soc 461); Sociology of the Family (Soc 462); Social Psychology of the Family (Soc 438); Sociology of Education (Soc 491); Political Sociology (Soc 465); Analytical Problems in Social Institutions (Soc 560); Values and Social Structure (Soc 561).

General Theory. Development of Sociology (Soc 470); Analytical Problems in Sociological Theory (Soc 570); History of Social Thought (Soc 571); Development of American Sociology (Soc 572); Contemporary Sociology (Soc 573); Theory Building in Sociology (Soc 575).

Graduate Work. The graduate program of the Department of Sociology, leading to the M.A., M.S., and Ph.D. degrees, is an intensive program designed to train professional sociologists for teaching, research, and administrative posts in sociology and related fields. Most candidates for the Ph.D. degree first obtain a master's degree, but occasionally qualified students who have completed one year of work in residence are permitted to develop programs leading directly to the Ph.D.

Students are not advised to seek an advanced degree in sociology unless they have achieved a grade-point average of 3.00 or better in their undergraduate work in the field; students whose undergraduate major has been in another field should have a grade-point average of 3.00 in all social science courses taken.

The Department of Sociology offers graduate study in four broad areas of concentration: theory and methodology, social psychology, social structures and processes, and social institutions. Theory and methodology are combined to insure that no student may concentrate in one without preparation in the other.

A core program, required of every graduate student, is provided in each of these broad areas. The graduate core courses are open only to students who have been accepted as candidates for an advanced degree. The core courses with their prerequisites insure that every graduate student will have at least a minimum

exposure to the subject matter of each of the general areas. The doctoral candidate, in consultation with his adviser, selects a field of specialization within one of the four core areas; in his specialized field he is expected to achieve a high level of competence through an intensive program of study culminating in the doctoral dissertation.

The department offers two programs leading to the master's degree. One program, leading to the M.A. degree, is designed as a stepping stone to the Ph.D. degree. The other leads to a terminal master's degree for students preparing to enter professional positions other than college or university teaching or research. No thesis is required in the latter program.

Candidates for the doctor's degree must demonstrate clearly their basic and serious commitment to a professional career in the social sciences, with particular emphasis on sociology. The doctoral candidate's dissertation must embody the results of research and show evidence of originality and ability in independent investigation. It is recommended that work on the dissertation be begun early in the doctoral program, so that the candidate's research experience will be an integral part of his total program of study.

A broad range of research is carried on by members of the staff. Graduate students often have opportunities to participate in planning and carrying out research projects. Graduate awards of various kinds are available for well qualified students. Emphasis is placed on close working relationships between students and faculty.

The department offers a graduate training program in methodology with three-year fellowships financed by the National Institute of Mental Health. Three-year fellowships are also provided through the National Defense Education Act. Graduate teaching assistantships and graduate research assistantships are available.

A brochure describing the graduate program in sociology in more detail and specifying the materials that must be submitted with applications for admission may be obtained from the department. Students applying for graduate awards should submit all necessary materials by February 1, if possible, and by March 1 at the latest. Applications for the fall term received after April 1 have a considerably reduced chance of favorable action.

LOWER-DIVISION COURSES

Soc 204, 205, 206. General Sociology. 3 hours each term.

Introduction to the sociological perspective; basic findings regarding the development, structure, and function of human groups and societies, with emphasis on the descriptive comparison of modern complex societies.

UPPER-DIVISION COURSES

Soc 300. Principles of Sociology. 3 hours.

Fundamental concepts and empirical findings in the field of sociology. Not open to students who have completed Soc 204, 205.

Soc 301. American Society. 3 hours.

An analysis of American society in terms of its significant structural traits and their functions; major changes in American society and selected contemporary problems examined in their relation to institutional structures. Prerequisite: Soc 204, 205 or Soc 300.

Soc 303. World Population and Social Structure. 3 hours.

Introduction to population studies, providing within a sociological framework an analysis of historical, contemporary, and anticipated population conditions and trends, as these are related to social situations and the organization of society. Prerequisite: Soc 204, 205, or Soc 300. Gale, Martin.

Soc 304. The Community. 3 hours.

Analysis of the structure and organization of human communities. Prerequisite: Soc 204, 205 or Soc 300.

Soc 305. Contemporary Social Problems. 3 hours.

Introduction to problems associated with the organization of social systems; deviant behavior and methods of social control. Prerequisite: Soc 204, 205, or Soc 300.

Soc 311. Introduction to Social Research. 3 hours.

The development of social research; the nature of scientific inquiry and basic methods and techniques; examination of representative sociological studies from the standpoint of methodology. Prerequisite: Soc 204, 205, 206 or consent of instructor. Armer, King, Polk.

Soc 334, 335. Social Psychology. 3 hours each term.

Analysis of psychological processes in relation to social situations. How languages, perception, learning, thinking, motivation, and attitudes determine and result from social interaction and group processes. Prerequisite: Soc 204, 205 or Soc 300. Armer, Ellis, MacGregor.

Soc 342, 343. Social Organization. 3 hours each term.

Examination in depth of analytical concepts and tools and their application to theoretical materials dealing with social organization. Prerequisite: Soc 204, 205, 206, or consent of instructor. Schafer.

Soc 401. Research. Hours to be arranged.

Soc 403. Thesis for Honors Candidates. Hours to be arranged.

Soc 405. Reading and Conference. Hours to be arranged.

Soc 406. Supervised Field Study. 1 hour each term.

No more than three hours of Supervised Field Study may be counted toward a degree in sociology.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Soc 407. Seminar. (G) Hours to be arranged.

Economic Sociology. Deutsch.
Sociology of Education. Armer, Schafer.
Sociology of Leisure. Johannis.
Juvenile Delinquency. Bisno.
Sociology of Illness and Health. Bisno, Howard.
Sociology of Professions. Bisno.
Problems of Change in Underdeveloped Areas. Deutsch, Gale.

Soc 411, 412, 413. Sociological Research Methods. (G) 3 hours each term.

Basic methodological problems such as the nature of science, the problem of meaning, formal and empirical systems, the use of models, causal inference under experimental and nonexperimental conditions, and field techniques of data collection. Prerequisite: elementary statistics; graduate standing in sociology or consent of instructor; the work of each term is prerequisite to that of the following term. Robinson.

Soc 415. Theory and Methods in Population and Ecology. (G) 3 hours.

Methodological problems and techniques in demographic and ecological analysis. Prerequisite: Soc 204, 205 or Soc 303, elementary statistics. Anderson.

Soc 423. The Family. (g) 3 hours.

The family in historical perspective. An introduction to the study of the family as a social institution and small group association. Prerequisite: Soc 204, 205, or Soc 300. Johannis, Rodgers.

Soc 425, 426. Principles and Concepts of Social Work. (g) 3 hours each term.

Analysis of the major components in the social-work services, such as the community setting, the organizational context of services, and the methods of providing service; emphasis on basic concepts and principles. Prerequisite: Soc 467, 468, 469. Acker, Bisno.

Soc 430. Theory of Small Groups. (G) 3 hours.

A systematic review of the influential theoretical and empirical writings, classical and current, dealing with the structure and functioning of small groups. Prerequisite: Soc 334 or Psy 215. Jackson, Johannis, King.

Soc 431. Group Dynamics. (g) 3 hours.

Analysis of the dynamics of group participation and leadership and the characteristics of effective groups. Prerequisite: Soc 430. Jackson.

Soc 436. Collective Behavior. (g) 3 hours.

Sociopsychological study of the behavior of persons in such collective contexts as crowds, mobs, panics, and social movements. Determinants and consequences of such behavior are analyzed, with attention to the possible connection between alienation and collective behavior in modern society. Prerequisite: Soc 334 or Psy 215. MacGregor.

Soc 438. Social Psychology of the Family. (G) 3 hours.

The dynamics of family interaction throughout the family life cycle. Prerequisite: Soc 423 or equivalent. Johannis, Rodgers.

Soc 440, 441. Criminology and Delinquency. (g) 3 hours each term.

The nature and extent of delinquency and crime as forms of deviant social behavior; contributing factors; current prevention and treatment programs. Prerequisite: Soc 204, 205, or Soc 300. Polk.

Soc 442. Urbanization and the City. (G) 3 hours.

Determinants and consequences of urbanization under different conditions; the city as a social and ecological system. Prerequisite: 9 hours in sociology. Anderson, Martin.

Soc 443. Social Control. (G) 3 hours.

Techniques and agencies by which the behavior of crowds, classes, associations, and publics is controlled. Prerequisite: Soc 334 or Psy 219, or consent of instructor.

Soc 445. Sociology of Race Relations. (g) 3 hours.

The development of "race consciousness" and emergent problems of race-culture contacts. Prerequisite: introductory course in sociology, anthropology, or psychology. MacGregor.

Soc 446. Sociology of Work. (G) 3 hours.

Sociological analysis of work in pre-industrial and industrial societies; the impact of industrial systems and technology on occupational structure, labor force, labor commitment, the meaning of work, bureaucratization, and industrial organization. Deutsch, Gale.

Soc 447. Industrial Sociology. (G) 3 hours.

The social structure of industry, the sociology of labor unionism and industrial relations, as influenced by changing political and technological factors, including a comparative analysis of industry and society and industrial relations systems in the developed and developing countries. Deutsch, Gale.

Soc 448. Sociology of Occupations. (G) 3 hours.

The nature, functions, and significance of occupational groupings in modern society; the relationships of occupation to other aspects of life; the significance of work for the various forms of social organization; the impact of change on individual occupations and occupational categories. Pellegrin.

Soc 449. Social Change. (G) 3 hours.

Analysis of the processes, characteristics, and conditions of change in large social systems; systematic examination of various theoretical problems and formulations. Prerequisite: 9 hours in sociology. Bisno.

Soc 451, 452. Social Stratification. (G) 3 hours.

Systematic analysis of the nature of social classes and castes, their determinants and historical development, and their consequences. Prerequisite: Soc 204, 205, or Soc 300. Ellis, Johnson.

Soc 460. Social Institutions. (G) 3 hours.

Analysis of social organization in terms of a system of interrelated and interdependent institutions; major focus on the development and utilization of an analytical framework in the examination of selected major institutions in American and other contemporary societies. Prerequisite: Soc 204, 205, or Soc 300. Johannis.

Soc 461. Sociology of Religion. (G) 3 hours.

Sociological analysis of religious belief and behavior; special attention to the relation between religious institutions and the larger societies of which they are a part. Prerequisite: Soc 204, 205 or Soc 300. Johnson.

Soc 462. Sociology of the Family. (G) 3 hours.

The family as a social institution and its relationship to other social institutions. Prerequisite: Soc 423 or equivalent. Johannis, Rodgers.

Soc 465. Political Sociology. (G) 3 hours.

Sociological theories and concepts brought to bear on the analysis of various aspects of political theory and behavior; social bases of power and policy determination; institutional interrelationships; intellectuals and ideologies; political trends and change; political participation and membership. Prerequisite: 9 hours of sociology. Bisno, Deutsch, Howard.

Soc 467, 468, 469. The Social Welfare Institution. (g) 3 hours each term.

Social work as a type of professional service offered within the framework of organized public and private programs, analyzed in terms of theory, principles, and methods past and present. Variations in ideology, organizational provisions, and practices related to the broader social milieu. Prerequisite: 9 hours in sociology; the work of each term is a prerequisite to that of the following term. Acker, Bisno.

Soc 470. Development of Sociology. (g) 3 hours.

Starting with Plato, the major writers and ideas that have shaped contemporary sociology are analyzed, with focus on recurrent concepts and issues that continue to challenge sociological inquiry. Special attention to the ways in which social structure affects social thought and vice versa. Prerequisite: 9 hours in upper-division sociology courses. MacGregor.

Soc 490. Sociology of Leisure. (G) 3 hours.

Sociological analysis of nonwork time and leisure behavior; the relationship between patterns of use of nonwork time and leisure and other social institutions. Prerequisite: 12 hours in sociology. Johannis.

Soc 491. Sociology of Education. (G) 3 hours.

Analysis of the major functions of education for the larger society; effects of societal change on education; the school and the community; the school as a social system. Prerequisite: 9 hours of sociology. Armer, Schafer.

GRADUATE COURSES

***Soc 501. Research.** Hours to be arranged.

***Soc 502. Supervised College Teaching.** Hours to be arranged.

***Soc 503. Thesis.** Hours to be arranged.

Soc 505. Reading and Conference. Hours to be arranged.

Soc 506. Supervised Field Study. 1 hour each term.

Not available for social work experience. No more than three hours of Supervised Field Study may be counted toward a degree in sociology.

Soc 507. Seminar. Hours to be arranged.

Comparative Family Systems. Johannis.
Contemporary Research on Family Sociology. Johannis, Rodgers.
Population and Social Structure. Martin.

* No-grade course.

Sociology of Religion. Johnson.
 Sociology of Science. Alpert.
 Sociology of Deviant Behavior. Polk, Schafer.
 Social Stratification. Ellis, Johnson.
 Sociology of Education. Armer, Schafer.
 Primary Human Interaction. Dubin.
 Theory of Action. Johnson.
 Urbanization. Martin.
 Quantitative Sociology. Robinson.
 Sociology of Adolescence. Polk.
 College Teaching of Sociology. Rodgers.
 Role Theory and Research. Jackson.
 Social Influence. Jackson.
 Organizational Communication. Jackson.
 Migration. Martin.
 African Studies. Armer.

Soc 518. Experimental Sociology. 3 hours.

Critical analysis of selected experiments in sociology; each student formulates a research problem and designs an experiment suitable for the testing of the hypothesis. Prerequisite: elementary statistics. Dubin.

Soc 530. Analytical Problems in Social Psychology. 3 hours.

Core course providing basic graduate orientation in social psychology. Prerequisite: graduate standing in sociology or consent of instructor; 9 hours in sociology; introductory psychology and social psychology. Jackson.

Soc 532. Propaganda and Social Control. 3 hours.

Propaganda as a means of social control; the nature of propaganda, the techniques used and the psychological and sociological conditions of their effectiveness; the implications of media of mass communication for stability and change of social systems. Prerequisites: Soc 334 or Psy 219, or consent of instructor.

Soc 537. Social Movements. 3 hours.

Study of the endeavors of groups of people to alter the course of events by their joint activities; social and psychological factors which give rise to social movements and determine their course; the relation of such purposive collective activity to the process of social and cultural change. Prerequisite: Soc 334, 335 or consent of instructor.

Soc 540. Social Structure and Processes. 3 hours.

Core course providing basic graduate orientation in problems of social system organization, stability, and change. Prerequisite: graduate standing in sociology or consent of instructor; 9 hours in sociology, including at least one course in social structures or social processes. Pellegrin.

Soc 541. Theory of Organization. 3 hours.

The analysis of formal organizations, their functions in social organizations their operating characteristics, and the person-organization linkage. Dubin.

Soc 542. Power and Influence in Community and Society. 3 hours.

Critical examination and evaluation of studies of power structures and the decision-making process, particularly at the community level, in terms of theoretical and methodological considerations. Pellegrin.

Soc 560. Analytical Problems in Social Institutions. 3 hours.

Core course providing basic graduate orientation to conceptual and theoretical problems in the area of social institutions. Prerequisite: graduate standing in sociology or consent of instructor; 9 hours of sociology, including one upper-division course in institutional area. Foskett.

Soc 561. Values and Social Structure. 3 hours.

Examination of value and belief systems as related to socially patterned behavior; consideration of major theoretical perspectives, methods of classification, and selected empirical studies. Prerequisite: 9 hours in sociology. Johnson.

Soc 570. Analytical Problems in Sociological Theory. 3 hours.

Core course. The nature and purpose of scientific theory, with special reference to sociology; critique of existing theoretical models in the field. Prerequisite: graduate standing in sociology or consent of instructor. Dubin, Johnson.

Soc 571. History of Social Thought. 3 hours.

An historical analysis of Western social thought in terms of its recurrent problems, its basic concepts, and its relation to contemporary sociological theory. Foskett.

Soc 572. Development of American Sociology. 3 hours.

The emergence of American sociology in the nineteenth century; the problems, concepts, and theories of leading American sociologists to 1930. Foskett.

Soc 573. Contemporary Sociology. 3 hours.

Analysis of the work of leading contemporary sociologists, with special emphasis on the problems, concepts, and methods of sociological inquiry.

Soc 575. Theory Building in Sociology. 3 hours.

Analysis in relation to theories in the behavioral sciences: the components of a scientific theory; the relationship between theory and research; the nature of scientific tests of theories. Dubin.

COURSE OFFERED ONLY IN SUMMER SESSIONS**Soc 508. Workshop.** Hours to be arranged.

Speech

Professors: BOWER ALY, R. P. FRIEDMAN, W. S. NOBLES, H. W. ROBINSON, J. R. SHEPHERD, GLENN STARLIN, K. S. WOOD.

Associate Professors: C. A. LEISTNER (department head), N. J. CHRISTENSEN, J. V. CUTLER, FABER DECHAINED, E. A. KRETSINGER, K. E. MONTGOMERY, OTTILIE T. SEYBOLT (emeritus).

Assistant Professors: C. W. CARMICHAEL,* D. G. FIBIGER, A. L. KADLEC, R. J. MERTZ, B. P. RYAN, R. E. SHERRIFFS.

Instructors: C. J. CLAVADETSCHER, E. L. COLEMAN, CELIA A. DORRIS, S. D. ELBERSON, KARIN O. FALKOFSKE, E. T. HALLETT, W. D. HERVEY, R. W. HITE, S. J. KAPLAN, B. O. KJELDAHL, M. J. MALINAUSKAS, F. J. MILLER, JOANN PATTON, C. E. SINGLETARY, CAROL M. TAYLOR, P. R. WALDO, W. J. WORTHLEY.

Assistants: JEAN C. ARMSTRONG, E. M. CHILLA, D. J. COLLINS, D. CHILTON CUNNINGHAM, MARY C. FORESTIERI, M. J. HOPKINSON, D. M. KELLY, MARYLYN A. NORDLUND, L. D. PATTON, M. W. PERRY, SHIRLEY A. PETROPOULOS, D. R. TEFF, R. B. TRAFTON.

THE DEPARTMENT OF SPEECH offers major curricula leading to the Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Fine Arts (in theater), Master of Science, and Doctor of Philosophy degrees, with opportunities for study in rhetoric and public address, radio and television broadcasting, speech pathology and audiology, theater, speech education, and communication theory and research.

Work in speech is also offered for students majoring in other fields. For these students, the department directs its efforts toward two principal objectives: (1) the development of the ability to communicate thought and feeling; and (2) the improvement of powers of appreciation and evaluation in listening and viewing.

* On leave of absence, fall term, 1967-68.

Practical experience in the various phases of the departmental program is provided through the University Theater, the University Symposium and forensic activities, the Division of Broadcast Services, and the Speech and Hearing Clinic, and the Speech Science Laboratory.

In the planning of its major undergraduate programs, the Department of Speech recognizes three principal objectives:

(1) The achievement, by all of its major students, of a broad liberal education. The following major requirements relate to this objective:

(a) To complement work in the department, the student must elect courses in other departments which are of substantial value in relation to his major program, including at least 18 term hours in upper-division courses in related fields.

(b) A maximum of 60 term hours of work in speech is recommended in the student's program for a bachelor's degree.

(2) Sufficient work in the several fields of speech instruction to provide an appreciation of the different areas of communication, including a minimum of 40 term hours in speech courses, at least 24 of which must be in upper-division courses.

(3) Concentration in at least one of the four following fields: rhetoric and public address, radio and television broadcasting, speech pathology and audiology, theater. Undergraduate programs should be developed in conference with an adviser in the field of emphasis. The minimum requirements in each of the four fields are listed before course listings below.

Secondary-School Teaching of Speech and Drama. For certification as a teacher of speech and drama in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

For information concerning subject preparation required to meet state standards in speech and drama and to obtain the recommendation of the University of Oregon, the student should consult the member of the faculty of the Department of Speech who serves as adviser for prospective teachers.

Certification as a Speech Correctionist. For certification as a speech correctionist eligible to work in the public schools of Oregon, the student must have the recommendation of the institution in which he completes his program and must satisfy minimum requirements established by the State Department of Education. For further information concerning certification the student should consult with the director of the speech pathology and audiology area.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Program. Information on graduate requirements, see GRADUATE SCHOOL.

Committee on Discussion and Debate. The national office of the Committee on Discussion and Debate of the National University Extension Association is located on the campus of the University of Oregon. The committee provides services to high-school debate leagues throughout the United States, including publication of *The Forensic Quarterly* and related books, distribution of discussion and debate materials, and maintenance of a forensics library.

Rhetoric and Public Address

The Department of Speech, through its rhetoric and public address program, seeks to give its undergraduate students a knowledge and appreciation of and a competence for speech making and other forms of human communication.

Students develop abilities in the various forms of public speaking and discussion, and study the theory of rhetoric. They develop competence in using the tools of communication research, gain a knowledge of the role of speech making in history, and become familiar with collateral material in and outside the field of speech.

In addition to all bachelor's-degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in rhetoric and public address: Fundamentals of Speech (Sp 121, 122, 123); Public Discussion (Sp 221 or 331); Theory and Literature of Rhetoric (Sp 301, 302, 303); Interpretation (Sp 229 or Sp 311); Argumentation, Persuasion, and Discussion (Sp 321, 322, 323); Speech Science (Sp 371); Classical, British, and American Oratory (Sp 421, 422, 423); Radio, Television, and the Public (Sp 448); History of the Theater (Sp 464); and 9 term hours of upper-division courses in either literature or history.

LOWER-DIVISION COURSES

Sp 121, 122, 123. **Fundamentals of Speech.** 3 hours each term.

Projects in extempore speaking. Sp 121, 122: emphasis on content, organization, performance, audience motivation, language, discussion, and parliamentary procedures. Sp 123: emphasis on voice and diction, bodily action and reading from the printed page; attention to style in the preparation and presentation of speeches. Special section for Honors College students.

Sp 221. **Public Discussion.** 2 hours any term.

Preparation of speeches for delivery before public audiences in conjunction with the University's forensic program. Nobles.

Sp 235. **Public Speaking.** 5 hours any term.

Theory and practice of public speaking, with constructive criticism of performance. Particular attention to individual problems in speechmaking. Not offered 1968-69.

UPPER-DIVISION COURSES

Sp 301, 302, 303. **Theory and Literature of Rhetoric.** 3 hours each term.

Selected readings on the principles of rhetoric and public address from Plato to modern times. Aly, Carmichael.

Sp 321, 322, 323. **Argumentation, Persuasion, and Discussion.** 3 hours each term.

Fall: argumentation; winter: audience motivation and audience response; spring: principles and practice in various discussion forms. Carmichael, Nobles.

Sp 331, 332. **Advanced Public Discussion.** 2 hours each term, winter and spring.

Preparation of speeches to be delivered before public audiences in conjunction with the University's forensic program. Prerequisite: consent of instructor. Nobles.

Sp 407. **Seminar.** Hours to be arranged.

Sp 416. **Speech Composition.** 3 hours any term.

Speech forms, types, and techniques; emphasis on application of basic rhetorical elements. Designed for prospective high-school teachers and other nonmajors. Prerequisite: upper-division standing. Montgomery.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Sp 421. **Classical Oratory.** (G) 3 hours.

Rhetorical criticism of masterpieces of Greek and Roman oratory. Prerequisite: Sp 301 or equivalent. Aly, Nobles.

Sp 422. **British Oratory.** (G) 3 hours.

British Oratory from Chatham to 1867. Prerequisite: Sp 301 or equivalent. Aly.

Sp 423. American Oratory. (G) 3 hours.

Study of American oratory to 1840. Prerequisite: Sp 301 or equivalent. Aly, Leistner.

GRADUATE COURSES***Sp 501. Research.** Hours to be arranged.***Sp 503. Thesis.** Hours to be arranged.**Sp 505. Reading and Conference.** Hours to be arranged.**Sp 507. Seminar.** Hours to be arranged.

Introduction to Graduate Study.
Communication Research Methods.
Studies of Attitude Changes.
Psychology of Communication.
American Oratory, 1840-1912.
American Oratory, 1912 to the Present.
British Oratory from 1867.
Classical Rhetorical Theory.
Ethics and Freedom of Speech.
Small Group Behavior.

Sp 511. Eighteenth-Century Rhetorical Theory. 3 hours.

The neoclassical interpretation of the canons of ancient rhetorical theory; its relation to the literary criticism, aesthetics, and logic of the period.

Sp 512. American Public Address. 3 hours.

The history of public speaking in the United States, with emphasis on the relation of historical development to current problems in criticism. Aly, Friedman.

Sp 513. Recent Rhetorical Criticism. 3 hours.

The revival of the Aristotle-Cicero canon; the impact of contemporary literary criticism on rhetoric; the relevance of content analysis to rhetorical criticism. Nobles.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION**Sp 225, 226. Public Speaking for Business and Professional Men and Women.**
2 hours each term.**Sp 424. Speech Forms and Techniques of Group Control.** (g) 3 hours.

Radio and Television Broadcasting

Courses in radio and television are designed to develop an awareness of the social and ethical responsibility of the broadcaster, as well as to provide basic knowledge and skill in production, programming, and performance.

In addition to all bachelor's-degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in broadcasting: Fundamentals of Speech (Sp 121, 122); Interpretation (Sp 229) or Elements of Acting (Sp 251); Fundamentals of Broadcasting (Sp 241); Principles of Advertising (J 341); Radio-Television Workshop (Sp 341, Sp 344, 345); Radio-Television Script Writing (Sp 347, 348, 349); Radio-Television Production, Direction, Programming (Sp 444, 445, 446); and Radio-Television and the Public (Sp 448). At least one term must be elected from each of the following sequences: Appreciation of Drama and Motion Pictures (Sp 267, 268, 269); Survey of Visual Arts (AA 201, 202, 203); and Introduction to Music and Its Literature (Mus 201, 202, 203). A year's sequence of courses must be completed from either Theory and Literature of Rhetoric (Sp 301, 302, 303); Introduction to Music and Its Literature

* No-grade course.

(Mus 201, 202, 203) ; or Survey of Visual Arts (AA 201, 202, 203). In addition, a minimum of 9 term hours in basic psychology is required. At least 9 hours of the 18-hour requirement outside the department will be a sequence selected from the area of visual communications.

LOWER-DIVISION COURSE

Sp 241. Fundamentals of Broadcasting. 2 hours any term.

General survey of broadcasting, including history, growth, social aspects, laws and policies, station and network organization, programming, the advertiser, the listener, public interest, standards of criticism, comparison of broadcast systems, international broadcasting, and propaganda. Kretsinger, Starlin, Sherriffs.

UPPER-DIVISION COURSES

Sp 341. Radio and Television Workshop. 2 hours.

Broadcast performance technique; physical, acoustic, and mechanical theory and its application; interpretative theory and its application. Prerequisite: consent of instructor. Hallett, Kretsinger, Sherriffs.

Sp 342, 343. Radio Workshop. 2 hours each term.

Theory and practice of radio broadcasting. Prerequisite: Sp 341. Shepherd.

Sp 344, 345. Television Workshop. 2 hours each term.

Theory and practice of television broadcasting. Prerequisite: Sp 341. Hallett, Kretsinger, Sherriffs.

Sp 347, 348, 349. Radio and Television Script Writing. 2 hours each term.

Radio and television writing techniques; theory and practice in the writing of all major continuity types. Prerequisite: junior standing. Kretsinger, Starlin.

J 407. Seminar. Hours to be arranged.

Television problems. Radio-television station policies.

Sp 407. Seminar. Hours to be arranged.

J 431. Radio-Television News I. 3 hours.

For description see SCHOOL OF JOURNALISM.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 432. Radio-Television News II. (G) 3 hours.

For description see SCHOOL OF JOURNALISM.

Sp 444. Radio-Television Production. (G) 3 hours.

Problems and procedures in the synthesis of talent, material, sponsorship, etc. in broadcast production. Preparation and production of live broadcasts. Prerequisite: consent of instructor. Shepherd.

Sp 445. Radio-Television Direction. (G) 3 hours.

Theory and technique involved in the broadcasting directional assignment. Practice in directing typical formats developed for radio and television. Prerequisite: Sp 444, consent of instructor. Shepherd.

Sp 446. Radio-Television Programming. (G) 3 hours.

Analysis of values, trends, and procedures in programming broadcast schedules; problems in planning program structure to meet community and public service needs. Prerequisite: consent of instructor. Sherriffs.

Sp 448. Radio and Television and the Public. (G) 3 hours.

The influence and importance of broadcasting as a social, political, and cultural force; the development of broadcasting; public-service broadcasting; the rights and duties of listeners; public opinion and propaganda influence. Kretsinger, Shepherd, Starlin.

Sp 469. Lighting for Television. (G) 2 hours.

Functions of light in the television studio; theories, methods, and special equipment for lighting television productions. Prerequisite: Sp 263 or consent of instructor.

Sp 470. Methods in the Production of Educational Television. (G) 3 hours.

Intensive study of distinctive characteristics of instruction by television through both open and closed circuit. Studio exercises built around regular projects and demonstrations of television teaching for critical evaluation and analysis. Prerequisite: consent of instructor. Sherriffs.

GRADUATE COURSES***Sp 501. Research. Hours to be arranged.*****Sp 503. Thesis. Hours to be arranged.****Sp 505. Reading and Conference. Hours to be arranged.****Sp 507. Seminar. Hours to be arranged.**

Introduction to Graduate Study.
Problems of Education by Television.
British Broadcasting.
Research in Broadcasting.
Film for Television.

Sp 541. Theory and Criticism of Broadcasting. 3 hours.

A comparative study of systems of broadcasting; the development of ethical, artistic, and critical standards in radio and television. Starlin.

Sp 544. Radio-Television Program Evaluation. 3 hours.

Background and development of broadcast measurements; experimental and survey procedures applicable to the testing of hypotheses in these media. Prerequisite: Mth 425 or equivalent. Kretsinger, Mertz.

Speech Pathology and Audiology

The objectives of the program in this area are: (1) to provide students with a knowledge of the scientific aspects of speech and hearing; (2) to provide knowledge concerning the symptoms, diagnosis, and treatment of the various types of speech and hearing disorders; (3) to provide, along with study courses, the opportunity for extensive supervised clinical practice; (4) to give the student an understanding of linguistic functions as a form of human behavior and to relate this knowledge to his liberal studies.

Undergraduate work given in this area is not intended to be terminal for professional work. Students completing the degree program may be recommended and certified for professional employment for a limited period, but completion of a fifth-year planned program is required for continued employment.

In addition to all bachelor's-degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in Speech Pathology and Audiology: Phonetics (Sp 370); Speech Science (Sp 371); Experimental Phonetics (Sp 472); Speech Pathology (Sp 481, 482, 483); Clinical Speech Therapy (Sp 484, 485, 486); Audiology (Sp 487, 488, 489); Seminar: Methods in Public School Speech (Sp 407); Seminar: Teaching of Lip Reading (Sp 407). In addition, a minimum of 9 term hours in general psychology and a minimum of 9 term hours in other areas of speech are required. The required 18 upper-division term hours in courses from other departments which are substantially related or complementary to the major program are usually selected from education, psychology, sociology, and anthropology.

* No-grade course.

Students majoring in this area are expected to have adequate speech ability or to achieve adequate speech performance before graduation.

LOWER-DIVISION COURSES

Sp 97, 98. **Spoken English for the Foreign Student.** 3 hours each term.

A phonetic approach to English conversation, vocabulary building, perception and practice for those whose native tongue is not English. Two hours of language laboratory each week in addition to the regular class meetings. Admission to Sp 98 by permission of instructor. Montgomery.

Sp 130. **Voice and Articulation.** 3 hours any term.

Study and practice in the perception and production of the elements of American speech. Limited to students seeking articulatory or vocal improvement. Ryan.

UPPER-DIVISION COURSES

Sp 370. **Phonetics.** 3 hours.

Study of sounds used in speech. Determination of sounds; their symbolic nature; their production; physical and psychological problems involved in their perception; sectional differences. Ryan.

Sp 371. **Speech Science.** 3 hours.

A study of the anatomy, psychology, and physics of speech. Wood.

Sp 407. **Seminar.** Hours to be arranged.

Teaching of Lip Reading.
Methods in Public School Speech.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Sp 472. **Experimental Phonetics.** (G) 3 hours.

Experimental methods in voice and phonetics; analysis and measurement of variables in the production of speech. 1 hour of laboratory work required. Prerequisite: Sp 370, Sp 371 or consent of instructor. Wood.

Sp 481, 482, 483. **Speech Pathology.** (G) 3 hours each term.

Symptoms, causes, and treatment of speech abnormalities. Fall: functional articulatory defects, delayed speech, emotional speech disorders; winter: organic speech disorders, including deviations due to congenital malformation, injury, deafness, and neurological impairment; spring: public school speech correction, specific techniques in the diagnosis and treatment of major speech problems. Prerequisite: Sp 370, Sp 371 or consent of instructor. Christensen, Ryan, Wood.

Sp 484, 485, 486. **Clinical Speech Therapy.** (G) 2 hours each term.

Supervised clinical audiometry and speech therapy with children and adults, enrolled for counseling, testing, and treatment in the Speech and Hearing Clinic; group discussion of case histories and techniques. Prerequisite: Sp 481, 482 or consent of instructor. Christensen, Ryan, Wood.

Sp 487, 488, 489. **Audiology.** (G) 3 hours each term.

The auditory function, hearing impairment, and the speech education or re-education of persons with hearing loss. Fall: anatomy of the ear, psychophysics of hearing, physical attributes of speech sounds, types and causes of hearing loss, speech involvements of deafness; winter: auditory tests and their clinical interpretation, selection and use of hearing aids; spring: speech and auditory training, psychology of deafness, school and vocational problems. Prerequisite: Sp 370, Sp 371 or consent of instructor. Christensen.

GRADUATE COURSES

*Sp 501. **Research.** Hours to be arranged.

*Sp 503. **Thesis.** Hours to be arranged.

* No-grade course.

Sp 505. **Reading and Conference.** Hours to be arranged.

Sp 507. **Seminar.** Hours to be arranged.

Introduction to Graduate Study.

Psychology of Speech.

Auditory Disorders.

Stuttering.

Articulation.

Speech and Language Development in Children.

Voice Problems.

Cleft Palate.

Aphasia.

Behavior Modification in Speech Therapy.

Advanced Speech Science.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Sp 392. **Principles and Techniques of Speech Correction.** 3 hours (extension and summer sessions).

Sp 490. **Lip Reading for the Deaf and Hard-of-Hearing.** (G) 3 hours (extension).

Sp 491. **Advanced Language Development for the Deaf.** (G) 3 hours (extension).

Sp 492. **Voice and Speech for the Deaf.** (G) 3 hours (extension).

Theater

The theater program is basically oriented toward the liberal arts-humanistic pattern. Some specific courses are preprofessional in nature and provide a vocational level of competence in teaching and in some aspects of commercial theater.

The specific fields of study within the area include: acting, directing, design, costume, lighting, history, stagecraft, dramatic literature, interpretation, and theory. The courses in these fields of study are available to both majors and nonmajors.

In addition to all bachelor's-degree requirements of the University and the Department of Speech, the following minimum requirements are specified for students with a major emphasis in theater: Theater Principles (Sp 261, 262, 263); 6 term hours of work selected from Production Workshop (Sp 264, 265, 266) and Costume Workshop (Sp 315); Elements of Acting (Sp 251); Elementary Dance (PE 180 or 190); either Technique of Acting: Voice (Sp 351) or Technique of Acting: Character (Sp 352); Play Direction (Sp 364); and History of the Theater (Sp 464, 465). A minimum of 15 term hours in courses in the Department of Speech, but outside the theater area, is required. It is recommended that the total 15 term hours not be concentrated in any one of the outside areas.

LOWER-DIVISION COURSES

Sp 229. **Interpretation.** 2 hours.

The application of the principles of oral reading to literature.

Sp 251. **Elements of Acting.** 3 hours.

Elementary principles of acting technique. Must be taken concurrently with PE 180 or PE 190, Elementary Dance.

Sp 252. **Make-Up.** 1 hour.

The history, purpose, and techniques of application of theatrical make-up; the use of make-up in the various theatrical media, with emphasis on stage and television performers. Fibiger.

Sp 261, 262, 263. **Theater Principles.** 1 hour each term.

Development of the physical theater; the mechanics of its stage and shops;

planning and construction of stage settings and properties; basic principles of stage lighting. Kadlec.

Sp 264, 265, 266. **Production Workshop.** 2 or 3 hours each term.

Practical experience in the construction, painting, and handling of scenery, and in the lighting of plays. Prerequisite: Sp 261, 262, 263, or concurrent registration. Kadlec.

Sp 267, 268. **Appreciation of Drama.** 2 hours each term.

Study of design, acting, and playwriting, for the purpose of achieving a better appreciation of the drama.

Sp 269. **Appreciation of the Motion Picture.** 2 hours.

Study of the motion picture as a dramatic art form. Robinson.

UPPER-DIVISION COURSES

Sp 311. **Advanced Interpretation.** 3 hours.

Instruction in the discovery and oral expression of meaning and feeling in prose, poetry, and dramatic literature. DeChaine.

Sp 315. **Costume Workshop.** 3 hours.

Instruction in the art and craft of stage costuming; practical experience in the design, construction, and maintenance of theatrical costumes. Fibiger.

Wr 321, 322, 323. **Play Writing.** 3 hours each term.

For description, see page 174.

Sp 351. **Technique of Acting: Voice.** 3 hours.

Problems in the use of voice in dramatic roles. Cutler, DeChaine.

Sp 352. **Technique of Acting: Characterization.** 3 hours.

Problems in the analysis and presentation of characters. Cutler, DeChaine.

Sp 353. **Advanced Acting.** 3 hours.

Advanced problems in acting technique: study, rehearsal, and performance. Prerequisite: Sp 251, Sp 351, Sp 352; consent of instructor. Cutler, DeChaine, Robinson.

Sp 364. **Play Direction.** 3 hours.

Sources of dramatic material, choice of plays, casting and rehearsal of players, production organization. DeChaine, Robinson, Cutler.

Sp 365. **Direction of Children's Theater.** 3 hours.

History and objectives of theater for the child audience; survey of existing professional and community children's theater programs; techniques of acting, directing, and producing plays for and by children. Fibiger.

Sp 407. **Seminar.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Eng 411, 412, 413. **English Drama.** (G) 3 hours each term.

For description, see page 170.

Eng 420, 421, 422. **Modern Drama.** (G) 3 hours each term.

For description, see page 170.

Sp 460. **Advanced Play Direction.** (G) 3 hours.

Advanced theory and practice in direction of plays for public performance. Prerequisite: Sp 364 or consent of instructor. Cutler, Robinson, DeChaine.

Sp 461. **Introduction to Scene Design.** (G) 3 hours.

Basic principles and techniques of theatrical design for the school and community theater. Prerequisite: Sp 261, 262, 263 or consent of instructor. Kadlec.

Sp 462. **Styles in Scene Design.** (G) 3 hours.

History of scene design; historical styles and their use in the design of produc-

tions of theater classics; twentieth-century approaches to production design; the designer's analysis of the play script. Prerequisite: Sp 461. Kadlec.

Sp 463. Advanced Problems in Scene Design. (G) 3 hours.

Selected problems in the design of dramatic productions. Prerequisite: Sp 461, Sp 462; consent of instructor. Kadlec.

Sp 464, 465, 466. History of the Theater. (G) 3 hours each term.

An historical study of the theater from ancient to modern times. Cutler, DeChaine.

Sp 467, 468. Lighting for the Stage. (G) 2 hours each term.

The functions of lighting on the stage. Fall: the qualities of light, lighting instruments, control systems; winter: theories and methods of lighting stage productions. Prerequisite: Sp 263 or consent of instructor. Kadlec.

GRADUATE COURSES

***Sp 501. Research.** Hours to be arranged.

***Sp 503. Thesis.** Hours to be arranged.

Sp 505. Reading and Conference. Hours to be arranged.

Sp 507. Seminar. Hours to be arranged.

Introduction to Graduate Study.

Interpretation.

Cinematography.

Theater Structure.

Theater Management.

History of the American Theater.

Producing the New Play.

Advanced Technical Practice.

Avant Garde Theater.

Scandinavian Drama.

Classical Theater.

Continental Theater.

Advanced Acting.

Twentieth Century Scenic Aesthetics.

Sp 551, 552, 553. Theory of Dramatic Production. 3 hours each term.

Fall: theory of acting; winter: theory of dramatic direction; spring: theory of dramatic structure. Cutler, Robinson.

* No-grade course.

School of Architecture and Allied Arts

WALTER L. CREESE, Ph.D., Dean of the School of Architecture and Allied Arts.

GEORGE M. HODGE, JR., M.S., Assistant to the Dean.

FRANCES S. NEWSOM, M.A., Architecture and Allied Arts Librarian.

Architecture

Professors: R. S. HARRIS (department head), G. F. ANDREWS, J. L. BRISCOE, R. R. FERENS, F. T. HANNAFORD, W. S. HAYDEN, G. M. HODGE, JR.

Associate Professors: S. W. BRYAN, PHILIP DOLE,* BROWNELL FRASIER (emeritus), L. T. JOHNSON, E. E. MOURSUND, R. A. SMITH.

Assistant Professors: E. D. COOK,* W. R. DAVENPORT, R. R. DVORAK, P. C. GILMORE, M. A. GURAN, A. W. HAWN, H. E. HUDSON, T. W. KLEINSASSER, D. L. PETING, J. S. REYNOLDS, D. N. RINEHART, J. E. STAFFORD, D. M. TAYLOR, R. L. UNRUH, S. J. WANAT.

Instructors: ERNEST MUSTER, M. D. UTSEY.

Lecturers: EUGENIO BATISTA, M. B. CAMPBELL, C. M. PEARSON, O. T. POTICHA, J. H. QUINER, DE NORVAL UNTHANK, W. W. WILSON.

Research Associate: E. M. PALLETT.

Assistants: U. A. BERKE, BARRY BRUCE, NENA LOVINGER, DON MERKT, M. A. SHARKAWY.

Landscape Architecture

Professors: F. A. CUTHBERT (department head), G. S. JETTE, W. M. RUFF,†

Assistant Professors: J. F. GILLHAM, W. H. HAVENS, R. J. LOVINGER, L. L. WALKER.

Assistants: H. C. KERR, AUSTIN TAO.

Urban Planning

Professor: H. W. BUFORD.

Associate Professor: W. R. DALE (department head).

Lecturer: J. D. HUNT.

Fine and Applied Arts

Professors: JACK WILKINSON (department head), D. J. MCCOSH, A. M. VINCENT, JAN ZACH.

Associate Professors: P. E. BUCKNER, D. G. FOSTER,* R. C. JAMES, C. M. NIXON, FELIX PASILIS, VICTORIA A. ROSS (emeritus), C. B. RYAN, FRANCISCO SAINZ.

Assistant Professors: LAVERNE KRAUSE, J. V. SOEDER, D. R. STANNARD, MORRIS YAROWSKY.

Instructors: W. H. BREVOORT, O. B. CHAMBERLAIN, D. L. DUNCAN, J. U. STARCK.

* On leave of absence 1967-68.

† On sabbatical leave 1967-68.

Assistants: J. B. BROOKINS, EDWARD GEIS, FOREST GERMAN, THOMAS GUYOT, BUCK HAYDEN, STEVEN KINGMAN, M. V. KRISHNAN, J. H. LEHMAN, J. R. McDONALD, RICHARD PICKERING, P. A. RENNER, D. A. SANDERS, D. V. SANDERS, GAIL SIGFORD, J. L. STEELE, CHARLES STOKES, WALLACE WELTZIN.

Art History

Professors: M. D. ROSS (department head), W. S. BALDINGER.*

Associate Professors: A. D. MCKENZIE, PATRICIA LAWRENCE.

Assistant Professors: MARIAN C. DONNELLY, CATHERINE KRAHMER.

Lecturers: ESTHER J. LEONG.

Assistants: JANET LOVELL, ERIC MCCREADY.

Art Education

Professors: VINCENT LANIER (department head), T. O. BALLINGER,† J. W. BURGNER.

Associate Professors: JANE GEHRING,† G. L. KENSLEY, JUNE K. MCFEE.

Assistant Professor: R. C. PAULIN.

Instructors: R. F. BADHAM, G. W. FERRINGTON, JESSIE LOVANO, J. D. SMITH.

Assistants: W. J. BRUCE, KATHRYN U. GLOSS, S. K. SHORE, A. A. YUSKO.

THE SCHOOL OF ARCHITECTURE AND ALLIED ARTS offers instruction leading to baccalaureate and advanced degrees in the fields of architecture, interior architecture, landscape architecture, urban planning, drawing and painting, sculpture, ceramics, weaving, jewelry and metalsmithing, art history, and art education. Most art studio courses and all courses in art history may be elected by nonmajors.

Admission. The major curricula in the fields listed above are organized on an upper-division and graduate basis. Freshman students intending to major in any of these fields are enrolled in the College of Liberal Arts and pursue, for two years, a program combining liberal arts courses with introductory preprofessional courses in the School of Architecture and Allied Arts.

The lower-division preprofessional courses are planned to provide continuity of training and experience in the several major fields throughout the student's undergraduate years. Educational continuity is further insured through the assignment of members of the faculty of the School of Architecture and Allied Arts as advisers to preprofessional students.

Before admission as professional majors, students are expected to satisfy all lower-division requirements of the University.

Students transferring to the University from other collegiate institutions for work in the School of Architecture and Allied Arts must satisfy the regular lower-division requirements, including both liberal arts and preprofessional requirements, before admission as professional majors. Students transferring from institutions outside the Oregon State System of Higher Education must have earned a 2.50 grade-point average for all courses for which credit is transferred. Credit may be transferred for courses that are the equivalent of University offerings; but transfer students wishing credit toward major requirements for upper-division professional work completed at another institution must first submit evidence of ability for performance at an advanced level.

Facilities. The school is housed in Lawrence Hall, named in memory of Ellis F. Lawrence, first dean of the School of Architecture and Allied Arts. The build-

* On sabbatical leave 1967-68.

† On leave of absence 1967-68.

ing contains drafting rooms, exhibition rooms, studios, classrooms, a library, and staff offices.

The school provides desks, easels, and certain materials that are not readily available for individual purchase. Students supply their own instruments and drawing materials; these materials are obtainable from the University Cooperative Store.

The Architecture and Allied Arts Library is a reference collection of about 6,000 books, administered as a branch of the University Library.

All work done by students is the property of the school unless other arrangements are approved by the instructor.

Graduate Work. The School of Architecture and Allied Arts offers graduate work leading to master's degrees in architecture, landscape architecture, urban planning, painting, graphic arts, sculpture, ceramics, weaving, art education, and art history. Graduate programs may emphasize either creative work or technical, theoretical, and historical studies. Graduate work in the school is governed by the regulations of the Graduate School and by special requirements of the School of Architecture and Allied Arts. The following graduate degrees are granted:

Doctor of Philosophy—in history of art. Reading knowledge of both French and German required. For general requirements see pages 121-122.

Master of Architecture—execution of a creative architectural project of comprehensive scope, with emphasis on the investigation of environmental design problems; elective studies in relevant academic and professional disciplines. Graduates from accredited five-year architectural programs are admitted on presentation of documents showing potential for academic-professional performance.

Master of Landscape Architecture—for creative work in landscape design or research relating to the urban region, or other studies dealing with specific phases of work in landscape architecture. Students applying for admission may be requested by the department head to submit samples of design work or other material for which he has been responsible.

Master of Urban Planning—a thesis usually required, but with appropriate education and professional experience the student may, with approval of the faculty, elect to take additional course work in lieu of the written thesis.

Master of Fine Arts—for creative work only, requiring completion of a terminal creative project in painting, graphic arts, mural design, sculpture, or applied design. The M.F.A. degree may also be awarded upon completion of a project involving work in more than one of these fields. The candidate may be required to hold a comprehensive public showing of his work. Two examples of each student's work may be retained by the School of Architecture and Allied Arts.

Master of Arts—for graduate study in the history of art. Reading knowledge of French or German required; both highly desirable. Written thesis required.

Master of Science or Master of Arts—for programs of graduate study in art education on the elementary and secondary levels.

Candidates for the Doctor of Philosophy or Doctor of Education degree in the School of Education may elect art education as a major field.

Architecture

THE CURRICULUM IN ARCHITECTURE, leading to the degree of Bachelor of Architecture, is a five-year program. The lower-division program includes courses which provide acquaintance with the elementary aspects of architecture;

these courses are organized to insure continuity with the professional work begun in the third year. The following courses are required for admission to an upper-division major in architecture:

First Year	Term Hours
Design Studio I (Arch 187)	9
Painting (Art 290) or Sculpture (Art 293) or Drawing (Art 291)	6
Mathematics	12
Second Year	
Design Studio II (Arch 287)	9
Architectural Graphics (Arch 231, 232, 233)	6
Design Orientation (Arch 11, 12, 13)	0
Physics	9
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206)	9

Because the upper-division program is planned in continuity with the basic courses offered during the first two years, students intending to major in architecture at the University of Oregon are strongly advised to enter the University as freshmen, in order to profit by this continuous training. Students transferring from other institutions, with preprofessional preparation differing from the pattern indicated above, may be admitted to the professional curriculum upon examination. The following upper-division program is required:

Third Year	Term Hours
Architectural Design (Arch 387)	12
Environmental Control Systems (Arch 320, 321, 322)	9
Theory of Structures I (Arch 369, 370, 371)	12
History of Architecture I (ArH 337, 338, 339)	9
City Planning I (LA 353, 354, 355)	6
Fourth Year	
Architectural Design (Arch 487)	15
Theory of Structures II (Arch 469, 470, 471)	9
History of Architecture II (ArH 437, 438, 439)	9
Surveying for Architects (Arch 317)	2
Elective	4
Liberal-arts elective	9
Fifth Year	
Architectural Design (Arch 587)	18
Ethics & Practice (Architecture) (Arch 529)	2
Construction Communications (Arch 417, 418, 419)	6
Elective	11
Liberal-arts elective	9

Of the total of 15 hours of electives included in the fourth and fifth years, 9 hours must be taken in the School of Architecture and Allied Arts.

The requirements for a structural option include the courses listed above and, in addition:

	Term Hours
Calculus	12
Theory of Structures III (Arch 472, 473, 474)	12

Graduate work is offered in architecture, leading to the Master of Architecture degree. For requirements, see page 120.

The curriculum in architecture is accredited by the National Architectural Accrediting Board.

Business and Construction. Under the joint supervision of the School of Architecture and Allied Arts and the School of Business Administration, the University offers a five-year program of study for students who plan to enter the construction industry. The program, which leads to a bachelor's degree with a major in business administration, combines training in business methods and in the structural phases of architecture. For requirements see pages 290-291.

LOWER-DIVISION COURSES

***Arch 11, 12, 13. Design Orientation.** No credit.

Lectures on the theory and practice of planning and design, intended to acquaint the student with the scope and nature of the design professions. Required for majors in architecture, landscape architecture, and interior architecture. Normally taken concurrently with Arch 287. 1 hour. Moursund.

Arch 121. Construction Materials. 2 hours any term.

Materials and techniques of construction used in buildings and their furnishings. Materials utilized in framing, fabrication, enveloping, surfacing, and finishing. Aspects of color, scale, texture, techniques for use. Manufacture, distribution, availability, maintenance, and depreciation. Field trips, demonstrations, illustrated lectures, and laboratory investigation.

***Arch 187. Design Studio I.** 3 hours each term.

Execution of design projects and exercises intended to familiarize the student with fundamental concepts of environmental design. Students are encouraged to develop habits of problem formulation and sound bases for value judgments; the release of the student's potential creative capacities is a primary concern of the course. Campbell, Dvorak, Guran, Moursund, Smith, Taylor.

Arch 231, 232, 233. Architectural Graphics. 2 hours each term.

Intensive study of systems of drawing. Orthographic projection, descriptive geometry. Integration of the media and methods controlling delineation and other expressions of architectural subjects. 6 hours required for majors in architecture. Dvorak, Utsey.

***Arch 287. Design Studio II.** 3 hours each term.

The major factors which influence design decisions; relation of the physical and human environment to design; integration of design considerations involved in the production of an art form. Required for majors in architecture, interior architecture, and landscape architecture. Prerequisite: Arch 187 or equivalent. Campbell, Dvorak, Ferens, Harris, Hudson, Moursund, Peting, Stafford, Unruh.

UPPER-DIVISION COURSES

Arch 317. Surveying for Architects. 2 hours fall or spring.

Elements of plane surveying adapted to the needs of architects; field practice in the use of steel tape, level, and transit; determination of building-plot contours and their interpretation on plot-plan drawings; methods of calculating excavations and fills for building purposes. Quiner.

Arch 320, 321, 322. Environmental Control Systems. 3 hours each term.

Requirements for the control of sound, light, heat, air movement, and the distribution of fluids in buildings. Study of electrical and mechanical systems, the principles for their design, and their impact on building forms. Prerequisite: Ph 101, 102, 103; Mth 104. Reynolds.

Arch 369, 370, 371. Theory of Structures I. 4 hours each term.

Application of mathematics to the design of building structures. Wood and steel construction; beams, columns, and simple frames; the relationship of structural design to architectural design. Prerequisite: algebra, trigonometry, physics. Briscoe, Peting.

***Arch 387. Architectural Design.** 1 to 8 hours any term.

Exploration of the creative process in architecture through development of design projects. Methods of problem solution, visual communication; individual criticisms, review of drawings and models, group discussion, field trips. Prerequisite: Arch 287. Kleinsasser, Reynolds, Taylor, Unthank, Wanat.

Arch 401. Special Studies. Hours to be arranged.**Arch 405. Reading and Conference.** Hours to be arranged.

* No-grade course.

Arch 407. **Seminar.** Hours to be arranged.

Arch 417, 418, 419. **Construction Communications.** 2 hours each term.

Examination of the information required for communication of the construction processes in building. Study of current conventions and the investigation of new techniques for information processing.

Arch 420, 421, 422. **Building Materials and Construction.** (g) 3 hours each term.

Study of materials and methods of building construction. Contract documents and their use. Materials and labor estimating methods used by contractors and material dealers. Hannaford.

*Arch 487. **Architectural Design.** 1 to 10 hours any term.

Extension of creative processes; synthesis and coordination of technological, cultural, and social aspects of architecture; design projects, individual criticism, group discussions, lectures and discussions by visiting specialists, reviews of projects. Prerequisite: 12 term hours in Arch 387. Batista, Campbell, Gilmore, Guran, Poticha, Unruh.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Arch 469, 470, 471. **Theory of Structures II.** (G) 3 hours each term.

Wood and steel building trusses, reinforced-concrete building construction; retaining walls, footings, and foundations for buildings. Prerequisite: Arch 369, 370, 371. Hodge.

Arch 472, 473, 474. **Theory of Structures III.** (G) 4 hours each term.

Continuous frames, rigid frames, and their effects on architectural design. A series of problems, presented in conjunction with fifth-year architectural design. Hannaford.

GRADUATE COURSES

*Arch 501. **Special Studies.** Hours to be arranged.

Arch 505. **Reading and Conference.** Hours to be arranged.

Arch 507. **Seminar.** Hours to be arranged.

Arch 509. **Graduate Terminal Project.** Hours to be arranged.

Open only to master's degree candidates.

*Arch 529. **Ethics and Practice (Architecture).** 2 hours fall or spring.

Problems of professional ethics, business relations, office management, etc. Open only to fifth-year students. Hayden.

Arch 541. **Architecture as Amenity.** 2-4 hours.

The effect of social theory on the planning and design of buildings for human use; concepts of social amenity as a factor in the architectural environment; direct relations of the field of architecture with the humanities and the sciences. Hayden.

Arch 542. **Architecture as Form.** 2-4 hours.

Form and space-ordering concepts in contemporary architecture; procedures for the solution of aesthetic problems in planning and design; analysis of the morphology of building space. Harris.

*Arch 587. **Architectural Design.** 1 to 12 hours any term.

Relation of architecture to the immediate environment and to the city-scape; analysis of determinant factors influencing planning and design. One-half of the year is devoted to the solution of problems of extensive scale and broad scope. The terminal architectural design project is executed as a final half-year problem under the direction of a thesis committee. Prerequisite: 15 term hours in Arch 487. Andrews, Bryan, Hayden.

* No-grade course.

Arch 599. Architecture Workshop. 2-4 hours any term.

Investigation of visual and tactile effects in architecture through experimental construction and demonstration; construction of full-scale mockups representing three-dimensional architectural space; integrated study of visual perception phenomena, light behavior, color influence, and perspective effect. Hayden.

Interior Architecture

The school offers a five-year curriculum in interior architecture leading to the degree of Bachelor of Interior Architecture. The lower-division program includes courses which provide acquaintance with the more elementary aspects of interior design, architectural design, and landscape design, organized to provide continuity with the professional design work begun in the third year. The curriculum is planned to prepare students for the professional practice of interior design.

For students who do not intend to practice professionally, the school also offers a two-year upper-division program in interior architecture, following two years of lower-division work; this program leads to a Bachelor of Science or Bachelor of Arts degree.

The following courses are required for admission to an upper-division major in interior architecture.

First Year	Term Hours
Design Studio I (Arch 187).....	9
Painting (Art 290).....	6

Second Year	
Design Studio II (Arch 287).....	9
Architectural Graphics (Arch 231, 232, 233).....	6
Interior Design (Arch 288).....	4
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206).....	9
Design Orientation (Arch 11, 12, 13).....	0

In the upper-division program, the student is assigned individual problems involving all phases of interior planning; emphasis is placed on creative development. Individual criticism is supplemented by lectures and reviews by members of the design staff. The student works in the same drafting room with the students and instructors in architecture and landscape design. The program includes field trips to acquaint the students with outstanding examples of current professional work in interior architecture. Opportunities are provided for collaboration on design problems with students in other fields in the arts. Students transferring from other institutions, with preprofessional preparation differing in some respects from the pattern indicated above, may be admitted to the professional curriculum upon examination.

The following courses are required in the three-year upper-division program:

Third Year	Term Hours
Interior Design (Arch 388).....	12
Materials of Interior Design (Arch 330, 331, 332).....	9
Ceramics (Art 255) or Weaving (Art 256).....	6
History of Architecture I (ArH 337, 338, 339).....	9
Liberal arts	12

Fourth Year	
Interior Design (Arch 488)	15
History of Interior Architecture (ArH 443, 444, 445)	6
Furniture & Accessories (Arch 424).....	2
Custom Cabinet & Furniture Design (Arch 425, 426).....	8
Advanced Ceramics (Art 455) or Advanced Weaving (Art 456).....	6
History of Architecture II (ArH 437, 438, 439).....	9
Liberal arts (upper-division).....	9

	Fifth Year	Term Hours
Interior Design (Arch 588).....		18
Ethics & Office Practice (Interior) (Arch 530).....		2
Working Drawings in Interior Arch. (Arch 462, 463, 464).....		9
Workroom Procedures in Interior Design (Arch 449).....		1
Art & architecture electives (American Architecture, Background of Modern Art, or Applied Design).....		9
Liberal arts		9

LOWER-DIVISION COURSES

Arch 223. **Elements of Interior Design.** 2 hours.

Introduction to the scope, aim, and techniques of interior design, intended to provide a comprehensive understanding of the professional field. Open to nonmajor students with consent of instructor. Hawn.

*Arch 288. **Interior Design.** 2 hours any term.

Introduction to the field of interior design; relation to architecture and the allied arts; the basic principles of design and planning processes by which interior spaces and forms are studied and executed. Hawn.

UPPER-DIVISION COURSES

Arch 330, 331, 332. **Materials of Interior Design.** 3 hours each term.

Critical survey and study of the properties, manufacture, and application of materials used in interior design. Field trips to supply sources, etc. Open only to professional majors. Davenport.

*Arch 388. **Interior Design.** 1 to 8 hours any term.

A series of creative problems in interior design; intensive analysis of design; methods of problem solution; individual criticism, review of design projects; group discussion and field trips. Prerequisite: Arch 287, 288. Johnson.

Arch 401. **Special Studies.** Hours to be arranged.

Arch 405. **Reading and Conference.** Hours to be arranged.

Arch 407. **Seminar.** Hours to be arranged.

Arch 424. **Furniture and Accessories.** 2 hours.

Analysis of standard lines of furniture and accessories; emphasis on design and its development, materials, methods of manufacture and distribution; furniture construction and techniques of shop drawing. Johnson.

Arch 425, 426. **Custom Cabinet and Furniture Design.** 4 hours each term.

First term: projects involving the design of custom furniture, preparation of detailed shop drawings, shop procedure; second term: construction of furniture designed during first term. Prerequisite: Arch 424. Open to nonmajors with consent of instructor. Johnson.

Arch 449. **Workroom Procedure in Interior Design.** 1 hour.

Technical study of old and new materials; design and installation; drawings and estimates. Visits to workrooms. For professional majors only.

Arch 462, 463, 464. **Working Drawings in Interior Architecture.** 3 hours each term.

Preparation of working drawings, specifications, and estimates for materials and labor on projects in interior design. For professional majors only. Johnson.

*Arch 488. **Interior Design.** 1 to 10 hours any term.

A series of advanced creative design problems in interior architecture intended to develop the analytical approach; emphasis on integration with architecture and landscape design. Individual criticism, group discussions, and reviews. Prerequisite: 12 term hours in Arch 388. Davenport.

* No-grade course.

GRADUATE COURSES

*Arch 501. **Special Studies.** Hours to be arranged.

Arch 505. **Reading and Conference.** Hours to be arranged.

Arch 507. **Seminar.** Hours to be arranged.

Arch 530. **Ethics and Office Practice (Interior).** 2 hours.

Ethics and office procedure for the interior designer in private practice; trade contracts, discounts, interprofessional relations; sources of materials.

*Arch 588. **Interior Design.** 1 to 12 hours any term.

Professional interior design problems of increasing complexity for one-half of the year, involving collaborative problems, field trips, and reviews. A terminal design project executed as a final half-year problem under the direction of a thesis committee. Prerequisite: 15 term hours in Arch 488. Hawn.

Landscape Architecture

THE CURRICULUM IN LANDSCAPE ARCHITECTURE, leading to the degree of Bachelor of Landscape Architecture, is a five-year program. The following courses are required for admission to an upper-division major in landscape architecture:

First Year	Term Hours
Design Studio I (Arch 187) or Basic Design (Art 295)	9
Painting (Art 290) or Sculpture (Art 293) or Drawing (Art 291), and Water Color (Art 292)	6
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206)	9
Second Year	
Landscape Design (LA 289)	2
Design Studio II (Arch 287)	9
Architectural Graphics (Arch 231, 232, 233)	6
Design Orientation (Arch 11, 12, 13)	0
Surveying for Architects (Arch 317)	2
Landscape Maintenance (LA 358, 359)	6
History of Architecture I (ArH 337, 338, 339)	3

The program provides the student with a broad educational background, together with technical studies essential for the professional practice of landscape architecture. Professional landscape architecture courses are supplemented by courses in art, architectural design, construction, and urban planning. Majors in landscape architecture work side by side with students of architecture and interior architecture, and have the benefit of design criticism from the entire faculty of the School of Architecture and Allied Arts. Opportunities are provided for collaboration on design problems by landscape architecture and architecture students. The instructional program includes field trips to acquaint students with outstanding examples of the design and construction of parks, cemeteries, airports, private properties, subdivisions, golf courses, and planned civic developments—and for study of the use of varying plant materials under conditions of climate, soil, and exposure.

Students planning to major in landscape architecture may obtain necessary preparation in mathematics by completing courses in high-school mathematics through trigonometry.

The following upper-division courses are required for a major in landscape architecture:

Third Year	Term Hours
Landscape Design (LA 389)	12
Plant Materials (LA 326, 327, 328)	9

* No-grade course.

	Term Hours
Landscape Construction I (LA 360, 361, 362).....	9
City Planning I (UP 353, 354, 355)	6
Landscape Structures (LA 366).....	3
Fourth Year	
Seminar: Landscape Design Theory (LA 407).....	3
Landscape Design (LA 489).....	12
Plant Composition (LA 430, 431, 432).....	9
Landscape Field Practice (LA 459).....	3
Landscape Construction II (LA 460, 461).....	6
History & Literature of Landscape Architecture (ArH 453, 454).....	6
History of Architecture II (ArH 439)	3
Fifth Year	
Landscape Design (LA 589).....	24
Ethics & Practice (Landscape) (LA 433, 434, 435).....	3
The Urban Region (LA 511), or City Planning II (UP 499).....	6-12
Seminar in Planning & Housing (UP 508) or Seminar in Planning Administration (UP 507)	6

During the three upper-division years, the student must complete 6 term hours of work in sculpture or painting and 9 term hours in electives outside the school, and 3 term hours of speech.

Two annual landscape design field trips are required prior to graduation.

The curriculum in landscape architecture is accredited by the American Society of Landscape Architects.

Graduate work is offered in landscape architecture, leading to the degree of Master of Landscape Architecture. For requirements see page 257.

LOWER-DIVISION COURSE

*LA 289. **Landscape Design.** 2 hours any term.

Study of the background and principles of landscape design; lectures, field trips, design of small properties. Open to nonmajors.

UPPER-DIVISION COURSES

LA 326, 327, 328. **Plant Materials.** 3 hours each term.

The characteristics, identification, and design uses of trees, shrubs, vines, and flowers. Open to nonmajors with consent of instructor. Ruff.

LA 357, 358, 359. **Landscape Maintenance.** 2 hours each term.

Cultivation of landscape plant materials; maintenance problems in relation to landscape architecture. Ruff.

LA 360, 361, 362. **Landscape Construction I.** 1 to 3 hours each term.

Elementary problems in the construction of landscape features. Prerequisite: Arch 317. Lovinger, Peting.

LA 366. **Landscape Structures.** 3 hours.

The design and construction of simple wood and masonry landscape structures. Peting.

*LA 389. **Landscape Design.** 1 to 8 hours any term.

A series of problems in landscape architecture, beginning a three-year sequence of intensive study in analysis, solution, and presentation. Seminars and field trips. Prerequisite: Arch 287. Cuthbert, Jette, Ruff, Lovinger, Havens, Gillham.

LA 401. **Special Studies.** Hours to be arranged.

LA 405. **Reading and Conference.** Hours to be arranged.

LA 407. **Seminar.** Hours to be arranged.

Landscape Design Theory.

* No-grade course.

LA 483. Plants for Interiors. 1 hour.

Ornamental plants suitable for interior spaces; care and maintenance; projects in growing plants under greenhouse and other conditions. Open to nonmajors. Ruff.

***LA 489. Landscape Design.** 1 to 10 hours any term.

A series of advanced problems in landscape architecture, with emphasis on broad planning problems and integration with architecture. Field trips and seminars. Prerequisite: 9 term hours in LA 389. Cuthbert, Jette, Lovinger, Ruff, Havens, Gillham.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**LA 411, 412, 413. Parks, School Grounds, and Recreation Areas.** (g) 3 hours each term.

Principles of landscape design, related to the location and development of land for school, park, and recreation uses. Topographical factors and construction and maintenance problems. Planned for students in recreation, urban planning, and educational administration. Lectures, reports, study trips, projects. Jette.

***LA 430, 431, 432. Plant Composition.** (G) 3 to 6 hours each term.

Design of plantings of trees, shrubs, and flowers. Lectures, field trips, and drafting. Prerequisite: LA 326, 327, 328.

LA 433, 434, 435. Ethics and Practice (Landscape). (G) 1 hour each term.

Professional ethics, office management, and principles of superintendence. Cuthbert, Jette, Ruff.

LA 459. Landscape Field Practice. (G) 3 hours.

Problems in making surveys, calculating grading, road layout, and siting.

LA 460, 461. Landscape Construction II. (G) 3 hours each term.

Advanced problems in landscape construction; retaining walls, drainage, irrigation; specification writing.

GRADUATE COURSES***LA 501. Special Studies.** Hours to be arranged.**LA 505. Reading and Conference.** Hours to be arranged.**LA 507. Seminar.** Hours to be arranged.**LA 509. Graduate Terminal Project.** Hours to be arranged.

Open only to master's degree candidates.

LA 511. Urban Open Spaces. 1 to 6 hours.

Location and design of public-use open spaces; emphasis on parks, waterfronts, and recreation areas. Seminar sessions, field trips, design projects.

LA 512. Landscape Planning Analysis. 4 hours.

Physical and ecological characteristics of the landscape; its potential uses in relation to population and urban growth factors. Lectures and seminar sessions.

LA 513. The Urban Region. 1 to 8 hours.

Theories, precedents, current projects and proposals. Seminar sessions; individual and group projects in land planning and design.

***LA 589. Landscape Design.** 1 to 12 hours any term.

Landscape-design problems of increasing complexity. Collaborative problems, field trips, seminars. Third term devoted to terminal project. Prerequisite: 12 hours in LA 489.

* No-grade course.

Urban Planning

THE UNIVERSITY OFFERS A PROGRAM of graduate study leading to the degree of Master of Urban Planning, for students interested in professional careers in city planning and in the planning of other areas affected by urbanization.

The program consists of a required core of educational experiences in the field of urban planning and in other relevant disciplines. Students have the opportunity to elect emphasis areas or concentrations that may further strengthen their ability in their field of special interest.

Professional work in the field of urban planning requires a broad professional education, based on technical and design disciplines and the social sciences. In the programs of study in urban planning at the University, the objective is not only to impart professional skills of current practice, but also to provide basic knowledge of the structure of the urban community, develop competence in theory and method, and foster creative imagination.

The urban planning program normally requires two years of study; the program can, however, be adjusted in light of the previous academic or professional experience of the individual student.

UP 353, 354, 355. City Planning. I. 2 hours each term.

Fall and winter: history and significance of city planning; modern achievements in zoning, housing, and city and regional planning. Spring: economic, practical, and aesthetic factors.

UP 401. Special Studies. Hours to be arranged.

UP 405. Reading and Conference. Hours to be arranged.

UP 407. Seminar. Hours to be arranged.

UP 499. City Planning II. (G) 1 to 6 hours any term.

Urban and regional planning. Seminars, field study, design laboratory. Prerequisite: LA 353, 354, 355. Dale.

UP 501. Special Studies. Hours to be arranged.

UP 505. Reading and Conference. Hours to be arranged.

UP 507. Seminar. Hours to be arranged.

UP 508. Seminar in Planning and Housing. 2 to 3 hours any term.

Discussions of housing and of urban and regional planning problems, led by faculty members and consultants. Assigned reading. Prerequisite: LA 353, 354, 355; fifth-year or graduate standing; consent of instructor. Dale.

UP 509. Graduate Terminal Project. Hours to be arranged.

Fine and Applied Arts

Painting and Graphic Arts

Work in painting at the lower-division level is offered both for students preparing for advanced professional study and for other University students who wish some experience in creative work as a part of a liberal education. Sufficient studio work is provided to insure adequate technical training as a basis for an upper-division major in painting.

At the upper-division level, the special interests of students (landscape, portraiture, mural design, commercial applications, etc.) are given attention and encouragement. All teaching is through individual criticism. The student works at his easel or drawing board on his particular problem, and receives individual help

from the instructor. A program of graduate study leads to the degree of Master of Fine Arts in painting and graphic arts.

The following lower-division courses in art are required as preparation for a major in painting or in graphic arts:

	Term Hours
Basic Design (Art 295).....	6
Survey of Visual Arts (ArH 201, 202, 203) <i>or</i> History of Western Art (ArH 204, 205, 206)	9
Painting (Art 290)	12
Drawing (Art 291)	4
Water Color (Art 292)	2

Painting. The upper-division major program leading to a bachelor's degree with a major in painting must include a minimum of 75 hours, normally distributed as follows:

Third Year	Term Hours
Painting (Art 390).....	9
Drawing (Art 391).....	9
Composition & Visual Theory (Art 392).....	6
Art history	9
Art electives	6

Fourth Year	Term Hours
Advanced Painting (Art 490).....	9
Advanced Drawing (Art 491).....	6
Composition & Visual Theory (Art 492)	9
Art electives	12

Graphic Arts. The upper-division requirements for a bachelor's degree with a major in graphic arts are as follows:

Third Year	Term Hours
Composition & Visual Theory (Art 392), Visual Continuity (Art 493).....	12
Fundamentals of Print Making (Art 349).....	6
Calligraphy & Letter Design (Art 382).....	2
Drawing (Art 391).....	6
Lithography (Art 480).....	2
Studio elective	4

Fourth Year	Term Hours
Composition & Visual Theory (Art 492), Visual Continuity (Art 493).....	12
Fundamentals of Print Making (Art 349).....	6
Drawing (Art 491).....	6
Painting (Art 490).....	6
Studio elective	4
Art history	4

Graduate work leading to the degree of Master of Fine Arts is offered in the field of painting and graphic arts. For requirements, see page 257.

Five-Year Curriculum Leading to Degree of Bachelor of Fine Arts. In addition to the four-year program leading to the B.A. or B.S. degree, the department offers a five-year program leading to the degree of Bachelor of Fine Arts. The requirements are as follows: (1) completion of a five-year program totaling 222 term hours of credit; (2) satisfaction of all University requirements for a bachelor's degree; (3) satisfaction of the major requirements of the Department of Fine and Applied Arts for a four-year baccalaureate program and, in addition, in the fifth year, 23 term hours of studio work, 9 term hours in art history, and Terminal Creative Project (Art 498), 4 hours. Students who have completed a four-year curriculum in art at another institution may be admitted to the fifth-year program; such students must, however, satisfy the University 45-hour residence requirement for the B.F.A. degree.

LOWER-DIVISION COURSES

Art 290. Painting. 2 to 3 hours any term.

Instruction in the use of oil color, water color, and other media. Registration permitted any term, but it is desirable that the work be started in the fall. 12 term hours required for upper-division standing. Krause, Foster, Pasilis, Ryan, Sainz, Soeder, Vincent, Yarowsky.

Art 291. Drawing. 1 to 3 hours any term.

Training in observation and selection of significant elements. Registration permitted any term, but it is desirable that the work be started in the fall. 6 term hours required for upper-division standing. Buckner, Krause, Ryan, Sainz, Soeder.

Art 292. Water Color. 2 to 3 hours.

The technique and use of water color, with special attention to its characteristics as a painting medium. Emphasis on landscape material. May be substituted for a third term of Art 291 to meet lower-division major requirement. Open to nonmajors with 4 hours of work in Art 291 or with consent of instructor. Krause, Soeder, Yarowsky.

***Art 295. Basic Design.** 2 hours each term.

Programming of information and processes invested in the act of designing; exercises in understanding the syntax of problem posing. Open to nonmajors. Special section for Honors College students. Brevoort, Chamberlain, Duncan, Lehman, Ryan, Stannard, Starck, Yarowsky.

***Art 298. Sketching.** 1 hour any term.

Sketching from costumed models, to develop ability to observe clearly and record accurately. Offered especially for nonmajor students who have had no previous training in sketching or drawing.

UPPER-DIVISION COURSES

Art 349. Fundamentals of Print Making. 3 hours.

Graphic reproduction and print techniques in silk screen, block printing, etching, and photographic processes. Starck.

Art 381. Water Color. 2 to 3 hours.

Continuation of Art 292. The technique and use of water color, with particular attention to landscape material. Ryan, Soeder.

***Art 382. Calligraphy and Letter Design.** 2 hours.

Basic historical and contemporary determinants of letter forms; configuration and recognition in relation to communication problems; development of skill and expression in the formation of letters. Starck.

Art 383. The Graphic Symbol. 2 hours.

Studies in symbolic communication with phonogram, monogram, and logogram. Exploration in the graphic evolution of symbols. Prerequisite: Art 382. Starck.

Art 390. Painting. 2 to 4 hours any term.

Third-year painting. Still life, figure, portrait, and landscape; pattern and space organization; color and design studies; various media and processes. Prerequisite: 9 hours in Art 290. McCosh, Pasilis, Vincent, Wilkinson.

Art 391. Drawing. 1 to 4 hours any term.

Second sequence in drawing. Space and form representation; analysis and statement of form; linear and total statement; structure and movement as factors in drawing; still life and figure; use of various media. Prerequisite: 6 hours in Art 291 or Art 292. Ryan, Soeder.

Art 392. Composition and Visual Theory. 2 to 4 hours any term.

Light, color, and design as they relate to painting problems; relationship of painting to architecture; mural design and other problems. Open to nonmajors with consent of instructor. Yarowsky.

* No-grade course.

- Art 401. **Special Studies.** Hours to be arranged.
- Art 405. **Reading and Conference.** Hours to be arranged.
- Art 407. **Seminar.** Hours to be arranged.
- Art 481. **Water Color.** 2 to 4 hours spring.
Advanced work in water color, with particular attention to landscape material. Open to nonmajors with consent of instructor. Continuation of Art 381. Ryan, Soeder.
- Art 482. **Anatomy for Artists.** 2 to 4 hours winter.
Study of the principles and formation of the skeletal and muscular structure of the human figure, as an aid to observation for graphic statements. Prerequisite: Art 290 or Art 291.
- Art 483. **Intaglio Printing Methods.** (G) 2 to 4 hours any term.
Etching, drypoint, engraving aquatint, soft ground, lift ground, relief etching as an extension of drawing. Prerequisite: Art 349 or consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Art 480. **Lithography.** (g) 2 to 4 hours any term.
Principles and methods of lithography; practice in all stages from the preparation of stones to the hand printing of editions. Special emphasis on the medium's contribution to drawing. McCosh.
- Art 490. **Advanced Painting.** (g) 2 to 4 hours any term.
Advanced problems in portrait figure, landscape, and still life, in all media. Prerequisite: 12 hours in Art 290 or Art 390. Vincent, Wilkinson, McCosh.
- Art 491. **Advanced Drawing.** (g) 1 to 4 hours any term.
Advanced work in drawing. Study of form from the figure. Prerequisite: 6 hours in Art 291 or Art 391. Ryan, Soeder.
- Art 492. **Composition and Visual Theory.** (G) 2 to 4 hours any term.
A study of light, color, surface, and visual processes as related to painting and visual communication. Wilkinson.
- Art 493. **Visual Continuity.** (G) 1 to 3 hours any term.
Study of the problems of image sequence and continuity in printed material, display, photography, and film. Prerequisite: Art 295 or consent of instructor. Open to nonmajors. Chamberlain.
- Art 495. **Cinemagraphics.** (G) 2 to 4 hours any term.
Study of moving imagery, both diagrammatic and photographic; use of film in visual communication. Prerequisite: Art 492 or Art 493. Chamberlain.
- Art 498. **Terminal Creative Project.** (G) Hours to be arranged.
Open only to candidates for the B.F.A. degree.

GRADUATE COURSES

- *Art 501. **Special Studies.** Hours to be arranged.
- Art 505. **Reading and Conference.** Hours to be arranged.
- Art 507. **Seminar.** Hours to be arranged.
- Art 509. **Terminal Creative Project.** Hours to be arranged.
- Art 580. **Graduate Studies in Print Making.** Hours to be arranged.
Advanced work in lithography and engraving. Black-and-white and multiple-color process.
- Art 590. **Graduate Studies in Painting.** Hours to be arranged.
Work at an advanced level with problems of color and form, techniques, and processes. Vincent, Wilkinson, Ryan, Soeder.

* No-grade course.

Art 591. Graduate Studies in Drawing. Hours to be arranged.

Work at an advanced level with problems of form, technique, processes, and visual theories.

Art 592. Graduate Studies in Visual Theory and Design. Hours to be arranged.

Advanced problems in visualization and design theory.

Sculpture and Applied Design

The program in sculpture and applied design includes instruction and major curricula in sculpture, ceramics, weaving, and jewelry and metalsmithing.

Sculpture. The degree program in sculpture is planned to provide a sound foundation for mature investigation of the practical, theoretical, and historical aspects of the discipline. The student is encouraged to take advantage of the opportunities offered by the University for liberal education, while at the same time developing appreciation and technique within the broad field of art.

In the lower-division classes, the emphasis is on elements in the language of form. Upper-division instruction enlarges upon theoretical perspectives, directing the student to personal investigations of the physical and expressive provinces of sculpture, to the study of constructive and destructive elements of light, and to the use of air as a plastic solid in equal partnership with the visible solid.

The following lower-division courses in art are required as preparation for a major in sculpture:

	Term Hours
Basic Design (Art 295).....	6
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206).....	9
Elementary Sculpture (Art 293).....	9
Drawing or Painting (Art 290 or Art 291).....	6

The upper-division major program in sculpture, leading to a bachelor's degree, includes the following required courses:

Third Year	Term Hours
Techniques of Sculpture (Art 393).....	15
Art history.....	9
Advanced Drawing (Art 491).....	6
Fourth Year	
Advanced Sculpture courses.....	15
Seminar (Art 407).....	6
AAA electives.....	9

For the requirements for the Master of Fine Arts degree with a major in sculpture, see page 257.

Applied Design. The University offers instruction and major programs in the following fields of applied-design: ceramics, weaving, and jewelry and metalsmithing. The following lower-division courses in art are required as preparation for a major:

	Term Hours
Basic Design (Art 295).....	6
Survey of Visual Arts (ArH 201, 202, 203) or History of Western Art (ArH 204, 205, 206).....	9
Drawing or Painting (Art 290 or Art 291).....	6
Applied design.....	9

The curriculum is designed to acquaint the student with the general character, techniques, and materials of applied design.

The upper-division major program in applied design, leading to a bachelor's degree, includes the following required courses:

	Third Year	Term Hours
Advanced applied design		12
Advanced studio course (drawing, painting, or sculpture).....		6
Art history		9
Art electives		9
	Fourth Year	
Advanced applied design.....		18
Advanced studio course.....		9
AAA electives		9

For the requirements for the Master of Fine Arts degree with a major in applied arts, see page 257.

LOWER-DIVISION COURSES

Art 255. Ceramics. 2 to 4 hours any term.

Introduction to ceramics with emphasis on pottery. Instruction offered in hand construction, throwing, glazing, and firing. Open to nonmajors. James, Stan-
nard.

Art 256. Weaving. 2 to 4 hours any term.

Introduction to basic weaving techniques. The dressing, care, and manipula-
tion of several types of looms. Experimentation with a wide variety of fibers.
Production of textiles of original design on 4- and 8-harness looms. Nixon.

Art 257. Jewelry and Metalsmithing. 2 to 4 hours any term.

Introduction to the handworking of nonferrous metals—copper, brass, bronze,
silver, gold; practical information about making jewelry and metal objects—
soldering, stone setting, centrifuge casting, forging, raising. Nixon.

Art 293. Elementary Sculpture. 2 to 4 hours any term.

Introduction to materials. Elementary considerations of form; technical and
compositional exercises in clay, plaster, wood, and stone. Sections for pre-
dental students and other nonmajors. Brevoort, Buckner, Zach.

UPPER-DIVISION COURSES

Art 393. Techniques of Sculpture. 2 to 6 hours any term.

Modeling problems in portraiture, figure study, and group composition. Tech-
nical and aesthetic considerations of the several sculptural media. Brevoort,
Buckner, Zach.

Art 401. Special Studies. Hours to be arranged.

Art 405. Reading and Conference. Hours to be arranged.

Art 407. Seminar. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Art 455. Advanced Ceramics. (G) 2 to 4 hours any term.

Advanced studio work on individual projects. Study of clay and glaze ma-
terials and kiln construction. Effect of kiln atmosphere on body and glaze.
Students assume responsibility for firing their own work. 30 term hours re-
quired for majors. Prerequisite: 6 term hours in Art 255. James.

Art 456. Advanced Weaving. (G) 2 to 4 hours any term.

Emphasis on creative work. Production of a wide variety of handwoven
fabrics. Historical studies, fabric analysis, spinning, dyeing. 30 term hours
required for majors. Nixon.

Art 457. Advanced Jewelry and Metalsmithing. (G) 2 to 4 hours any term.

Emphasis on creative work. Advanced problems in forging, raising, centri-
fuge casting, enameling, etching, stone setting. Nixon.

Art 458. Textile Printing. (G) 2 to 4 hours.

Advanced problems in design and color, applied to standard textiles. Tech-
nique in pattern design and yardage printing. Silk screen, block print, etc.

Art 489. Advanced Metal Casting. (G) 3 hours.

Basic principles of ferrous and nonferrous metal casting in lost wax and sand; experimental use of polyethylene and other casting methods. Design and operation of furnaces and ovens.

Art 494. Advanced Sculpture. (G) 2 to 4 hours any term.

Coordination of sculpture with related fields of architectural, landscape, interior, and industrial design. Buckner, Zach.

Art 496. Ceramic Sculpture. (G) 2 hours any term.

Techniques in building, modeling, molding, and surfacing terra cotta. Emphasis on the character of the materials and their effectiveness as sculptural media. Study of forms appropriate to residential and civic design. Prerequisite: three terms of Art 293, three terms of Art 255.

Art 498. Terminal Creative Project. (G) Hours to be arranged.

A requirement for the B.F.A. degree.

GRADUATE COURSES***Art 501. Special Studies.** Hours to be arranged.**Art 505. Reading and Conference.** Hours to be arranged.**Art 507. Seminar.** Hours to be arranged.**Art 509. Terminal Creative Project.** Hours to be arranged.**Art 594. Graduate Studies in Sculpture.** Hours to be arranged.

Work at the graduate level in the problems of forms and their relationship to space. Studio research into traditional and contemporary concepts to find personal expression.

Art History

THE PROGRAM IN ART HISTORY provides: (1) instruction in this basic aspect of human culture for all University students (all courses in art history are open to nonmajors); (2) the historic background in art and architecture needed in the several major curricula of the School of Architecture and Allied Arts; and (3) a core of studies for a major curriculum in the history of art.

The art-history major combines historical study with the opportunity for studio practice. It is designed to provide a broad perspective for the understanding of the art of the past and present, and a basis for critical judgment of individual works of art. The following lower-division courses are required as preparation for a major:

	Term Hours
Elementary studio courses (drawing, painting, sculpture, or applied design).....	12
History of Western Art (ArH 204, 205, 206) or Survey of Visual Arts (ArH 201, 202, 203).....	9
Two years of French or German.....	24

The upper-division major program in art history, leading to the degree of Bachelor of Arts, includes the following required courses:

Third Year	Term Hours
History of art (selected).....	18
Language or literature.....	9
Electives (recommended: art studio courses, history, anthropology, philosophy)...	18
Fourth Year	
History of art (selected).....	18
Language or Literature.....	9
Electives (recommended: Philosophy, history, anthropology, art studio courses)	18

* No-grade course.

LOWER-DIVISION COURSES

*ArH 201, 201, 203. **Survey of the Visual Arts.** 3 hours each term.

Cultivation of understanding and intelligent enjoyment of the visual arts through a study of historical and contemporary works; consideration of motives, media, and forms. Baldinger.

*ArH 204, 205, 206. **History of Western Art.** 3 hours each term.

An historical survey of the visual arts from prehistoric to modern times. Selected works of painting, sculpture, architecture, and other arts are studied in relation to the cultures producing them. Designed for nonmajor students, as well as for majors in art history. Special section for Honors College students. Donnelly, Lawrence, McKenzie.

ArH 207, 208, 209. **History of Oriental Art.** 3 hours each term.

An historical survey of the visual arts of Greater India, China, and Japan, from prehistoric to modern times; selected works of painting, sculpture, architecture, and other arts studied in relation to the culture in which they were produced. Designed for nonmajors, as well as for majors in art history. Leong.

UPPER-DIVISION COURSES

ArH 337, 338, 339. **History of Architecture I.** 3 hours each term.

Descriptive and critical analysis of architecture from prehistoric times to the Renaissance in Italy. Includes the study of ancient, mediaeval, Islamic, and pre-Columbian American architecture. Ross, Lawrence.

ArH 346, 347, 348. **History of Painting.** 3 hours each term.

Chronological and interpretative study of the language of painting. Emphasis on the development of painting from the Renaissance to the nineteenth century. Krahmer.

ArH 401. **Special Studies.** Hours to be arranged.

ArH 405. **Reading and Conference.** Hours to be arranged.

ArH 407. **Seminar.** Hours to be arranged.

ArH 443, 444, 445. **History of Interior Architecture.** 2 hours each term.

History of interior architecture, including the study of contemporary furniture, textiles, rugs, etc., as an art expression. Hawn.

ArH 453, 454. **History and Literature of Landscape Architecture.** 3 hours each term.

History of gardens and public open spaces. Fall: development of the formal garden from the end of the Middle Ages to the eighteenth century; winter: the landscape garden since the eighteenth century, Oriental and modern garden design. Majors in landscape architecture complete a year sequence with ArH 439. Ross.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

ArH 411, 412, 413. **Ancient Art.** (G) 3 hours each term.

Art of Bronze and Iron Age cultures in Mediterranean lands from the third millenium B.C. to the fourth century A.D. Lawrence.

ArH 421, 422, 423. **Mediaeval Art.** (G) 3 hours each term.

The art of the Middle Ages in Christian lands; early Christian, Byzantine, and early mediaeval art; Romanesque art; Gothic art. McKenzie.

ArH 431, 432, 433. **Renaissance Art.** (G) 3 hours each term.

Origin and development of Renaissance art in Italy and northern Europe in the fifteenth and sixteenth centuries.

* Students will not be permitted to enroll for both ArH 201, 202, 203 and ArH 204, 205, 206.

ArH 437, 438, 439. **History of Architecture II.** (G) 3 hours each term.

Descriptive and critical analysis of architecture from the Renaissance in Italy to the present day. Evolution of modern architecture. Ross.

ArH 440, 441, 442. **American Architecture.** (G) 3 hours each term.

History of architecture in the United States from the Colonial era to the present. Seminar discussions and research. Students wishing to devote additional time to the Pacific Northwest or other special regions may enroll also under ArH 401. Donnelly, Ross.

ArH 446, 447, 448. **Japanese Art.** (G) 3 hours each term.

Epochs of art in Japan, including architecture, landscape design, sculpture, and painting, from prehistoric time to the present. Baldinger.

ArH 450, 451, 452. **Art in Latin America.** (G) 3 hours each term.

Preconquest art of the Andean, Mexican, Mayan, and related cultures. Development of architecture, painting, and sculpture in the Spanish and Portuguese colonies from the sixteenth to the nineteenth centuries, with emphasis on the fusion of European and indigenous elements. Development of modern art in the twentieth century in Mexico and Brazil. Ross.

ArH 464. **Russian Art.** (G) 3 hours.

Russian art from the tenth century to 1914. Special emphasis on the architecture and painting of the mediaeval period. McKenzie.

ArH 461, 462, 463. **Chinese Art.** (G) 3 hours each term.

Origin and development of the major Chinese arts, including bronzes, sculpture, and painting, from the Shang through the Ch'ing dynasties. Leong.

ArH 476, 477, 478. **Modern Art.** (G) 3 hours each term.

Intensive study of the development of art in the nineteenth and early twentieth centuries. Prerequisite: ArH 201, 202, 203 or ArH 204, 205, 206. Baldinger.

GRADUATE COURSES

*ArH 501. **Special Studies.** Hours to be arranged.

*ArH 503. **Thesis.** Hours to be arranged.

ArH 505. **Reading and Conference.** Hours to be arranged.

ArH 507. **Seminar.** Hours to be arranged.

Ancient Art. Lawrence.

Mediaeval Art. McKenzie.

Renaissance and Baroque Art. Krahmer.

American Art. Donnelly, Ross.

Chinese Art. Leong.

Indian Art. Baldinger.

Islamic Architecture. Ross.

Prints and Drawings.

History of Film and Photography.

ArH 511, 512, 513. **The Art Museum.** 3 hours each term.

Theories and techniques in the operation of art museums. Baldinger.

ArH 514. **Art History Bibliography.** 1 hour.

Introduction to the bibliography of art history. Required for graduate students in art history. Lawrence.

Art Education

THE CURRICULUM IN ART EDUCATION leads to the B.S. or B.A. degree and fulfills requirements for basic certification for the teaching of art in the state of Oregon. The program is designed to prepare students for teaching art in junior

* Non-grade course.

and senior high schools and to provide a background for the supervision of art in the elementary-school program. The following lower-division courses are required as preparation for a major in art education. Art electives must include 4 to 6 hours in each of the following areas: drawing and painting, sculpture, ceramics, jewelry or weaving.

	Term Hours
Basic Design (Art 295).....	6
Survey of Visual Arts (ArH 201, 202, 203) <i>or</i> History of Western Art (ArH 204, 205, 206).....	9
*Human Development & Learning (Ed 315).....	5
Art electives (studio).....	24
Psychology.....	9

The following upper-division courses are required to complete requirements for a degree with a major in art education:

	Term Hours
Child, Art Lab. (ArE 314).....	3
Introduction to Art Education (ArE 315).....	3
Seminar: Student Teaching (ArE 407).....	1
Art in the Junior High School (ArE 316).....	3
Art in the Senior High School (ArE 414).....	3
*Student Teaching: Junior High (Ed 416 and ArE 407).....	6
*Student Teaching: Senior High (Ed 417 and ArE 407).....	6
Art electives chosen from: drawing, painting, lithography, water color, composition and visual theory, visual continuity, sculpture, ceramics, weaving, printmaking or jewelry.....	36-42
History of art.....	9
Seminar: Methods and Research in Secondary-School Art (ArE 407).....	3

A fifth year of preparation is required for permanent teacher certification in Oregon. Students working toward the completion of fifth-year requirements are advised individually concerning the selection of courses.

UPPER-DIVISION COURSES

†Art 311, 312. **Art in the Elementary School.** 2 hours each term.

First term: introduction to the visual arts through laboratory experiences; design, drawing, painting, and other two-dimensional activities with materials appropriate for the primary- and intermediate-school child; lectures, group discussions, evaluations, studio work. Second term: continuation of art experiences for the elementary-school child, with emphasis on three-dimensional form. Burgner, Lovano, Smith.

ArE 313. **Art in the Elementary School.** 3 hours.

Critical examination of individual and group activities currently offered in the elementary-school art program; lectures, curriculum design, evaluation of process and technique; literature in the field. Satisfies the Oregon State Department of Education methods-course requirement. Prerequisite: Art 311, 312 or consent of the instructor. Burgner, Lovano.

ArE 314. **Children's Art Laboratory.** 3 hours.

Work with children in a supervised art laboratory; designed for students preparing for art teaching at both the elementary and secondary levels. Required of all art education majors. Burgner.

ArE 315. **Introduction to Art Education.** 3 hours fall.

A lecture-laboratory-seminar study of the growth and developmental stages of children in relation to creative experience with visual-art materials. Required of all majors and students working for certification in secondary-school art. Prerequisites: Ed 310; two years of lower-division work in art studio and art history courses. Kensler, Lanier.

* Education courses required for certification by the Oregon State Department of Education.
† No-grade course.

ArE 316. Art in the Junior High School. 3 hours winter.

Critical evaluation of ideas, materials, and program content appropriate for art experiences of the pre-adolescent junior-high-school student. Lecture, laboratory course. Prerequisite: ArE 314, 315. Kensler, Lanier.

ArE 401. Special Studies. Hours to be arranged.

ArE 405. Reading and Conference. Hours to be arranged.

ArE 407. Seminar. Hours to be arranged.

Methods and Research in Secondary-School Art. Lovano.

Student Teaching: Junior High.

Student Teaching: Senior High.

***Ed 416. Supervised Teaching: Junior High School.** 5 to 15 hours any term.

***Ed 417. Supervised Teaching: Senior High School.** 5 to 15 hours any term.

Student teaching experience in the public schools. One hour a day, five days a week; first term junior high school, second term senior high school. Maximum credit, 15 hours for two terms. Permission for student teaching must be obtained from the art-education division. Lovano.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

ArE 409. Practicum. (g) Hours to be arranged.

Practicum experience provided in the use of creative activities as problem-solving opportunities for the mentally retarded child; laboratory experiences with art and craft materials.

ArE 411. Methods and Research Materials: Art in Elementary Schools. (G) 3 hours fall.

A study of significant literature and research in the field; laboratory investigation of materials, ideas, and methods currently used in elementary schools. Satisfies state certification requirement for an elementary art-methods course. Prerequisite: Art 311, 312, previous teaching experience, or consent of the instructor. Burgner.

ArE 414. Art in the Senior High School. (G) 3 hours spring.

A laboratory course designed to explore the possibilities of new and significant art activities appropriate for the adolescent. Prerequisite: ArE 314, ArE 315. Kensler, Lanier.

GRADUATE COURSES

***ArE 501. Special Studies.** Hours to be arranged.

ArE 505. Reading and Conference. Hours to be arranged.

ArE 507. Seminar. Hours to be arranged.

ArE 532. Supervision of Children's Art Laboratory. 3 hours any term.

Designed to provide an opportunity for work with children in a planned laboratory situation; responsibility for program design and supervision of children's art activities. Prerequisite: teaching experience or consent of instructor. Burgner.

ArE 535. Art and Architecture for the School Administrator. 3 hours.

Problems of the school administrator in the field of art programming; architectural principles in relation to school-plant design. Lectures and studio-laboratory demonstration.

* No-grade course.

Institute for Community Art Studies

JUNE K. McFEE, Ed.D.	Director
GORDON L. KENSLEY, Ed.D.	Research Associate
E. MARSHALL PALLETT, Ph.D.	Research Associate
DONALD B. DRISCOLL	Research Assistant

THE INSTITUTE FOR COMMUNITY ART STUDIES is a research and public service organization concerned with public understanding and appreciation of the arts, including architecture, community design, the natural and man-made landscape, the fine arts, and the traditional and experimental crafts.

Research is concerned with decision making in the arts, behavioral and aesthetic foundations of theoretical design, educational processes in the arts, and art as a means of social communication and cultural transmission.

Public service activities are focused on the development and evaluation of general education programs in the different aspects of the arts in the schools and communities of the state.

College of Business Administration

RICHARD W. LINDHOLM, Ph.D., Dean of the College of Business Administration.

JOHN W. SOHA, M.B.A., C.P.A., Assistant Dean, Undergraduate School of Business.

HAROLD K. STROM, Ph.D., Assistant Dean, Graduate School of Management and Business; Director of Transport and Logistics Research Center.

MARK R. GREENE, Ph.D., Director of Center for International Business Studies.

STUART U. RICH, D.B.A., Director of Forest Industries Management Center.

DONALD A. WATSON, Ph.D., Director of Bureau of Business and Economic Research.

Accounting and Business Statistics

Professors: C. E. JOHNSON, C. E. KELLY (emeritus), A. E. MACE, A. B. STILLMAN (emeritus).

Associate Professors: D. A. BAERNCOFF (department head), D. S. HARWOOD, JR., C. J. LUNESKI, J. W. SOHA, A. L. THOMAS.

Assistant Professors: P. M. FRISHKOFF, F. L. MCCARTHY, A. L. PEITERSON, J. E. REINMUTH, L. E. RICHARDS.

Instructors: L. C. HENRY.

Assistants: R. C. ANDERSON, E. K. LITRELL, R. L. C. MILLER, L. O. MOYER, P. D. OLSON, S. N. OLSON.

Finance and Business Environment

Professors: W. J. ROBERT (department head), R. W. LINDHOLM, V. P. MORRIS (emeritus), E. W. REED, L. M. STALLAERT, D. A. WATSON.

Associate Professors: L. P. ANDERSON,* W. S. BAUMAN, W. D. RICHINS, L. W. ROSS, JR.

Assistant Professors: T. W. CALMUS, W. H. PARKS.

Instructors: D. N. ANDREWS, J. W. OSBURN, R. K. SMITH, W. G. WATKINSON.

Assistants: ROBERT ACKERMAN, S. J. BENSON, R. G. COAN, JR., D. KARAKITSOS, G. D. KESLING, A. M. KOPPEL, B. C. OSBORN, R. SINGH, U. UDO-AGA, TOM VAN DAWARK, G. J. VAN DE WERFHORST.

Marketing, Insurance, and Transportation

Professors: D. S. TULL (department head), N. H. COMISH (emeritus), A. L. LOMAX (emeritus), M. R. GREENE, S. U. RICH, R. J. SAMPSON.

Associate Professors: R. R. ANDRUS, J. J. DASSO, N. R. SMITH, H. K. STROM, D. L. THOMPSON.*

Assistant Professors: J. R. WISH.

Instructors: S. H. GAMBLE, E. E. JOHNSTON, J. A. KNUTSEN, M. L. MURRAY, D. P. REMINGTON, PAUL SWADENER.

Assistants: J. J. COOK, C. E. BRUNNER, J. H. GRAHAM, L. L. GRIFFITH, L. E. JACOBS, H. O. PRUDEN.

* On leave of absence 1967-68.

Personnel and Industrial Management

Professors: S. C. VANCE (department head), E. F. BEAL, J. B. MINER.†

Associate Professors: W. B. BROWN, E. H. CONANT, C. M. JONES, H. C. PYRON, K. D. RAMSING,* F. J. SEUBERT, L. L. D. SHAFFER.

Assistant Professors: T. J. ANDERSON.

Instructors: D. R. BROWN, E. W. GEORGE, L. W. JACOBS, G. A. JOHNSON, H. G. REENTS, B. J. STARK, G. W. STURGEN.

Assistants: B. V. CORDES, C. C. COTTON, T. D. HINTHORNE, E. R. LITTLE, U. V. MANION, D. W. WHITE, H. E. WINKLEVOS.

Secretarial Science

Instructors: R. D. ARNOLD, L. R. NEEDHAM.

THE COLLEGE OF BUSINESS ADMINISTRATION recognizes, as its primary function in the University, the provision of the broad education and understanding essential for responsible careers in the business world. Leaders of today must be capable of continued adjustment to changing conditions in the firm and in the social, economic, and political environment within which the firm operates.

To insure such an education for its students, the college requires that undergraduate majors take a minimum of 40 per cent of their work in the liberal arts and sciences. Within the college, professional courses relate new insights and developments in the social and natural sciences to the needs of firms and organizations in meeting their responsibilities to the public and to their owners, employees, and customers.

Although the college is primarily concerned with providing capable administrative, research, and technical personnel for business, its curricula also provide excellent preparation for careers in government and education.

The instructional program of the college is offered in two schools: the Undergraduate School of Business and the Graduate School of Management and Business. The Graduate School of Management and Business operates under the general direction of the Graduate School of the University.

The College of Business Administration was established in 1914 as the School of Commerce; the name was changed to School of Business Administration in 1921; the present name was adopted in 1967. Its undergraduate program was accredited in 1923, and its M.B.A. program in 1962, by the American Association of Collegiate Schools of Business.

The following business honorary and professional societies have active chapters at the University: Alpha Kappa Psi, men's professional business fraternity; Beta Gamma Sigma, business administration scholastic honorary; Beta Alpha Psi, accounting; Delta Nu Alpha, transportation; Insurance Society; Phi Chi Theta, business women; Pacific Northwest Personnel Managers Association.

The college maintains student exchange programs with schools of business in foreign universities at the undergraduate and graduate levels.

Bureau of Business and Economic Research. The Bureau of Business and Economic Research works closely with the College of Business Administration in many programs of mutual interest. Its activities are described on page 128.

Forest Industries Management Center. The major activities of the Forest Industries Management Center include instruction, research, and industry con-

† On sabbatical leave 1967-68.

ferences. Introductory training is provided to undergraduate students interested in job opportunities in forest products companies (lumber, plywood, pulp and paper).

At the graduate level, the Center offers work leading to the M.B.A. degree with a major in forest industries management. This program, which supplements the regular core curriculum in business administration, is open to students with undergraduate degrees in forestry.

Center for International Business Studies. The Center for International Business Studies has three chief objectives: (1) to encourage greater interest in world affairs and international business problems among all students of business administration; (2) to stimulate faculty and student research in international aspects of business and related areas; and (3) to develop among students and faculty a greater awareness of the influence of the world cultural fabric on business and economics. Programs to carry out these objectives include:

(1) The European Exchange Program in Business Administration, in cooperation with The Netherlands School of Business, Zreukelen, The Netherlands.

(2) The encouragement and development of interdisciplinary study programs. Students working for M.B.A. and D.B.A. degrees may specialize in international business.

(3) A program of conferences, special lectures, and individual research in international business. The C.I.B.S. is in contact with other organizations and agencies specializing in international business, such as the Council for International Progress in Management, the Organization for Economic Cooperation and Development, and the European Association of Management Training Centers.

Transport and Logistics Research Center. The School of Business Administration recently established the Transport and Logistics Research Center (TLRC).

The Center's primary purposes are to foster research in the areas of transport and physical distribution management (logistics), and to encourage education in the field by involving students in research and bringing them into closer contact with faculty and industry. In addition, the Center conducts executive development programs for industry and government practitioners in the fields of transport and logistics management.

The School has conducted an academic program in transportation and related areas since 1919, and is one of the few schools of business administration offering a major academic program in this field.

Conferences and Lectures. Frequent conferences on general and specialized business problems are sponsored each year by the College of Business Administration, with the cooperation of business leaders of the Pacific Northwest. These conferences are usually open to students in the college.

Leaders in various fields of business are regularly invited to the campus to discuss new developments and professional opportunities with undergraduate and graduate students.

Undergraduate School of Business

TO EARN A DEGREE in the Undergraduate School of Business, a student must complete one of the major options offered by the four departments of the school, or an extradepartmental option in management systems described on page 282.

Accounting and Business Statistics—accounting; professional accounting; business statistics.

Finance and Business Environment—finance; international business.

Marketing, Insurance, and Transportation—marketing; insurance; transportation, traffic management, and utilities; real estate; business and construction.

Personnel and Industrial Management—production; personnel; management; business teacher education.

Degrees. The School of Business Administration offers undergraduate major work leading to the Bachelor of Business Administration, Bachelor of Science, and Bachelor of Arts degrees.

Honors. See HONORS COLLEGE, pages 130 ff.

Admission. The undergraduate major curricula in business administration are organized on an upper-division basis. Freshman students intending to major in business administration are enrolled in the College of Liberal Arts for a two-year prebusiness program, which combines liberal arts courses with introductory preprofessional courses in the College of Business Administration. The lower-division prebusiness courses are planned to provide continuity of training throughout the student's undergraduate years. Educational continuity is further insured through the assignment of members of the faculty of the College of Business Administration as advisers to prebusiness students.

Students planning to enroll in the Undergraduate School of Business for upper-division major studies leading to a bachelor's degree must make formal application to the dean of the school not later than one month before the opening of the term for which admission is sought. This is of crucial importance in meeting the upper-division requirement of the Undergraduate School of Business.

To be eligible for admission, the student must have satisfied all lower-division requirements of the University, must have a minimum of 93 term hours, must have maintained a C average in English Composition (Wr 121, 122, 123), and must have completed the following required prebusiness courses:

	Term Hours
Intro. College Math. (Mth 104, 105, 106)	12
Fundamentals of Speech (Sp 121)	3
Introduction to Law (FBE 226)	3
Intro. to Business Statistics (BS 232)	3
Principles of Economics (Ec 201, 202, 203)	9
Financial Accounting (Ac 221)	3
Introduction to Numerical Computation (Mth 233)	3

Business Environment, (MIT 125, 126) is recommended as a freshman elective, but is not required.

Major Requirements: To qualify for a bachelor's degree in the College of Business Administration, the student must complete the following: (1) a group of core courses required of all majors; (2) the specialized courses required in one of the major options offered by the School; (3) 45 term hours of upper-division courses in business after formal admission to the Undergraduate School of Business, or 66 term hours of upper-division work at the University of Oregon after formal admission to the Undergraduate School of Business. In addition, 40 per cent of the total hours required for the degree must be in business and economics subjects; 40 per cent of the total hours must be in courses other than business and economics, and all students must earn a 2.00 grade point average in all business courses taken and a 2.00 GPA in all business courses taken at the University of Oregon.

The upper-division core and option requirements are:

Upper-Division Core	Term Hours
Organization & Interpersonal Relations (PIM 321)	3
Marketing Systems and Demand Analysis (MIT 323)	3
Managerial Accounting (Ac 313)	3
Financial Management (FBE 322)	3

The core courses provide all able graduates with a general education for the management of business firms and a sound management background for careers in government and education and for life in our highly competitive and technical society. The major options offered by the several departments provide specialized training for a variety of careers in business.

Management Systems. An extradepartmental option in management systems has as its purpose the investigation of and research into the components of the total management system. These components or subsystems are studied in terms of both their physical and their abstract attributes. A management system is typically composed of the following elements: inputs, outputs, processors, controls (accounting, financial, and planning), and feedback information describing the relative position of the business operation. This option is designed to offer a foundation for further study of business systems at the graduate level. As a prerequisite to graduation, students electing this option must declare their major as either Accounting and Business Statistics or Personnel and Industrial Management.

	Term Hours
Management Information Systems (Ac 420)	3
Industrial Dynamics (BS 435)	3
Operations Research Techniques (PIM 428)	3
Seminar: Administrative Communications (PIM 407)	3
Computing (Mth 444)	4
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	16
ELECTIVES	
Cost Accounting (Ac 360)	3
Business Fluctuations & Expansion (FBE 466)	3
Quantitative Economic Analysis (Ec 464, 465, 466)	9
Theory of Small Groups (Soc 431)	3

Accounting and Business Statistics

PROGRAMS IN ACCOUNTING AND BUSINESS STATISTICS are designed to prepare students for professional careers in these fields and to provide all students of business with an understanding of the theory and techniques of quantitative analysis as a basis for administrative decision making.

Accounting. The major curriculum in accounting is a four-year program designed for students who wish to prepare for a professional career in business or government service with an emphasis on accounting and quantitative analysis of business data. Requirements, in addition to the core program of the school, are listed below:

	Term Hours
Asset Valuation & Income Measurement (Ac 350, 351)	6
Principles of Cost Accounting (Ac 360)	3
Corporate Accounts & Statements (Ac 352)	3
Elementary Inference in Business Statistics (BS 333)	3
Federal Income Tax (Ac 411)	3
Quantitative Analysis for Business Decisions (BS 432)	3
Accounting Verification (Ac 440)	3
Special Topics in Accounting (Ac 450)	3
Cost Analysis (Ac 460)	3
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	30

In addition to the specific courses listed above, accounting majors are required to complete:

(1) One year (12 term hours) of college mathematics during their lower-division years, the mathematics sequence to start at the highest possible level. Mth 104 is the typical starting level, but students who can start at a higher level

are required to do so. Courses in computing and mathematics of finance, or their equivalents, may not be counted toward satisfaction of this requirement.

(2) One year (9 term hours) in economics or in a behavioral science at the upper-division level (courses numbered 300 and above). Courses in cultural anthropology, psychology, and sociology are automatically included in the behavioral science category. Courses in other fields may be included by petition through departmental advisers.

Business Statistics. The major program in business statistics is designed to prepare the student for a career in business research; primary emphasis is on the application of modern statistical methods to business problems. Majors in business statistics must complete work in basic mathematics through calculus (equivalent of Mth 200, 201, 202, 203 or Mth 204, 205, 206). Additional courses in mathematics, accounting, and quantitative methods in economics or other social sciences are highly recommended. The major requirements, in addition to the core program of the school, are as follows:

	Term Hours
Elementary Inference in Business Statistics (BS 333)	3
Quantitative Analysis for Business Decisions (BS 432)	3
Applied Analysis of Variance (BS 433)	3
Principles of Cost Accounting (Ac 360)	3
Regression Analysis (BS 434)	3
Computing (Mth 444)	4
Economic Theory (Ec 375, 376)	6
Business Fluctuations & Expansion (FBE 466)	3
Minimum of 6 term hours selected from electives listed below	6
	<hr/> 34

ELECTIVES

Principles of Cost Accounting (Ac 361)	3
Industrial Dynamics (BS 435)	3
Problems in Business Finance (FBE 459)	3
Marketing Research (MIT 415)	3
Operations Research Techniques (PIM 428)	3
Economic Theory (Ec 377)	3
National Income & Business Cycles (Ec 483, 484, 485)	9
Introductory Linear Algebra (Mth 411)	3
Introduction to Statistical Theory (Mth 441, 442, 443)	9

Accounting

LOWER-DIVISION COURSES

Ac 221. Financial Accounting. 3 hours.

Description and derivation of the major financial statements prepared by accountants; the accounting rationale; primary emphasis placed on reports to stockholders and other investors. Intended both as an introduction to other courses and as a one-term terminal course in financial accounting. Special section for Honors College students. Prerequisite: sophomore standing.

Ac 222. Financial Accounting. 3 hours.

Continuation of Ac 221. Problems faced by the financial accountant in determining figures to be reported for monetary and nonmonetary assets; related problems in reporting ownership interests; analysis of financial statements. Special section for Honors College students. Prerequisite: Ac 221.

UPPER-DIVISION COURSES

Ac 311. Taxation and Business Policy. 3 hours.

Emphasis on the importance of the type of tax used to realize government revenue goals. New approaches to taxation of the business firm are considered as well as the impact of the current tax system on business decisions, efficiency of resource use, and the international balance of payments. Prerequisite: Ec 203.

Ac 313. Managerial Accounting. 3 hours.

Introduction to the development, presentation, and interpretation of accounting data to aid management in planning and controlling operations. Special section for Honors College students. Prerequisite: Ac 221.

Ac 350, 351. Asset Valuation and Income Measurement. 3 hours each term.

Accounting principles and procedures in asset valuation and management and in the determination of periodic income; problems of measurement and of interpretation of financial accounting data. Prerequisite: Ac 222, Ac 313.

Ac 352. Corporate Accounts and Statements. 3 hours.

Special problems of accounting for corporations; preparation and analysis of corporate financial statements; use of cash-flow and fund statements. Prerequisite: Ac 351.

Ac 360. Principles of Cost Accounting. 3 hours.

Continuation of Ac 313. Development, presentation, and interpretation of cost information for management; methods of data collection and display; problems of cost allocation; cost-price nexus; standard costs for control; capacity-overhead issues. Prerequisites: one year of college mathematics, BS 232, Ac 313.

Ac 407. Seminar. Hours to be arranged.**Ac 460. Cost Analysis.** 3 hours.

Quantitative methods applied to cost analysis; differential costs; complex mix-and-yield cost variances; time-preference and capital budgeting; project selection involving internal and external constraints; operations research and critical path methodologies as they pertain to cost matters. Prerequisite: Ac 360.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 302-303.)

Ac 411. Federal Income Tax. (G) 3 hours.

Designed for accounting majors and other majors alike. Intended to develop an understanding on the broad rules of income taxation, some familiarity with income tax procedures, and an awareness of the complexities and uncertainties inherent in our tax laws. Emphasis on tax planning rather than tax practice. Prerequisite: Ac 313.

Ac 412. Income Tax Procedures. (G) 3 hours.

Professional study and analysis of Federal and Oregon income tax structures and of the problems of determining income tax liabilities; determination of taxable income and computation of taxes for individuals, partnerships, corporations, estates, and trusts; introduction to tax research. Prerequisite: Ac 411.

Ac 420, 421. Management Information Systems. (G) 3 hours each term.

Study and analysis of information models for the management of complex organizations; secondary research on problems arising from indiscriminate mechanization of natural systems; generalized definitions of management information; adjustment to particularized definitions; total-systems flow charting; primary research into particularized information systems. Prerequisite: computer course work or experience with mechanized mass-data systems; senior standing or consent of instructor.

Ac 430. Fund Accounting. (G) 3 hours.

Financial administration and reporting requirements of governmental and nonprofit entities, emphasizing the use of fund accounting as a basis for budgetary control. Consideration of broader theoretical aspects of fund accounting and its possible extension to profit-oriented entities. Prerequisite: Ac 313.

Ac 440, 441. Accounting Verification. (G) 3 hours each term.

Auditing standards and procedures observed by certified public accountants in the examination of the financial statements of business and other organiza-

tions; audit standards and objectives, collection of evidence, evaluation of internal control, problems of verification and application of procedures, preparation of programs, work papers, and reports. Prerequisite: Ac 352, Ac 360.

Ac 450, 451. **Special Topics in Accounting.** (G) 3 hours each term.

Advanced topics in financial accounting analysis of cash flows and the capital budgeting decision; special problems in partnership accounting; accounting reports for firms in financial difficulties; consolidated financial statements; estate and trust accounts and reports. Prerequisite: Ac 352; one year of college mathematics.

Ac 480, 481. **Advanced Accounting Problems.** (G) Hours to be arranged.

Problems in professional examinations given by the American Institute of Certified Public Accountants; emphasis on problem analysis and development of working papers. Prerequisite: consent of instructor.

Business Statistics

LOWER-DIVISION COURSE

BS 232. **Introduction to Business Statistics.** 3 hours.

Elementary statistics as a tool for business decision-making. Primary emphasis on statistical description (tables, charts, and frequency distributions) and the elements of probability; consideration of index numbers and time series analysis (trend, cyclical, and seasonal adjustments) of business data. Prerequisite: Mth 106.

UPPER-DIVISION COURSE

BS 333. **Elementary Inference in Business Statistics.** 3 hours.

Applications of statistical inference to business situations; sampling and its role in estimation and hypothesis testing; simple linear regression analysis and correlation. Special section for Honors College students. Prerequisite: Mth 106, BS 232 or equivalent.

BS 407. **Seminar.** Hours to be arranged.

Dynamic Time-Dependent Processes.
Linear Systems.
Sampling Techniques.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see page 303.)

BS 432. **Quantitative Analysis for Business Decisions.** (G) 3 hours.

Uses of subjective probability and utility theory in dealing with conditions of risk and uncertainty in business situations; elementary mathematical models of business behavior. Prerequisite: one year of college mathematics; BS 232, BS 333 or equivalent.

BS 433. **Applied Analysis of Variance.** (G) 3 hours.

Design of comparative experiments in business administration; models and methods for analysis of variation in measurement data; weighing of evidence from comparative business experiments. Prerequisite: one year of college mathematics; BS 232, BS 333 or equivalent.

BS 434. **Applied Regression Analysis.** (g) 3 hours.

Survey of graphical and numerical procedures for curve fitting based on the classical method of least squares; application of regression procedures in the analysis of measurement data and in the elucidation of underlying relationships governing business and economic behavior. Prerequisite: one year of college mathematics; BS 232, BS 333 or equivalent; consent of instructor.

BS 435. **Industrial Dynamics.** (G) 3 hours.

Analysis of information-decision systems in business organizations; development of competence in modeling the dynamic operation of such systems, in performing simulation experiments, and in analyzing results. Prerequisite: one year of college mathematics; consent of instructor.

Finance and Business Environment

THE PROGRAM offered by the Department of Finance and Business Environment is designed to prepare students for careers in the basic fields of domestic and foreign finance. The courses provide a fundamental understanding of the application of economic analysis to the solution of problems of business management and of business finance and financial institutions, with special attention to the relation of financial policies and operations to the functioning of the economic system as a whole.

The department offers two major options: finance and international business.

Finance. The finance curriculum is designed to impart an understanding of the various areas and principles of finance and to provide students majoring in this area with a body of specialized knowledge and analytical techniques. Courses are offered in the area of banking, financial management, and investments. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Financial Institutions (FBE 320)	3
Case Problems in Financial Management (FBE 340)	3
Introduction to Investments (FBE 363)	3
Commercial Bank Management (FBE 460)	3
Elementary Inference in Business Statistics (BS 333)	3
Minimum of 9 term hours selected from electives listed below	9
	24

ELECTIVES

Taxation & Business Policy (Ac 311)	3
Real Estate Finance (FBE 440)	3
Financial Analysis (FBE 459)	3
Investment Management (FBE 464)	3
Intro. to Real Estate & Urban Land Use (MIT 322)	3
Risk and Insurance (MIT 354)	3
Accounting (Ac 350, 351, or 352)	3
International Finance Management (FBE 474)	3
Business Fluctuations and Expansion (FBE 466)	3
Financial Accounting (Ac 222)	3
Computing (Mth 444)	3
One of the following: Quantitative Analysis for Business Decisions (BS 432), Applied Analysis of Variance (BS 433), Applied Regression Analysis BS 434)	3

International Business. The option in international business is designed to prepare students for careers in overseas and foreign divisions of domestic businesses. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
International Finance Management (FBE 474)	3
Foreign Trade Marketing (FBE 475)	3
Foreign Business Operations (FBE 476)	3
Foreign Commercial Law (FBE 407)	3
Minimum of 12 term hours selected from electives listed below	12
	24

ELECTIVES

International Economics (Ec 440, 441, 442)	9
Money & Banking (Ec 318)	3
International Finance (Ec 320)	3
International Transportation & Distribution Management (MIT 351)	3
Economic Problems of the Pacific (Ec 345)	3
Foreign language or courses in foreign culture	9

Students are advised to enrich their training through a wide selection of courses in foreign languages, geography, history, and political science and additional courses in economics and business administration.

LOWER-DIVISION COURSES

FBE 226. Introduction to Law. 3 hours.

Forms and functions of the law in society. Examination of the American legal environment: structure of the courts; trial and appellate procedure; origin of rules; methods of legal reasoning; roles of trial participants. Emphasis on the law of contracts, including appropriate references to the Uniform Commercial Code.

UPPER-DIVISION COURSES

FBE 320. Financial Institutions. 3 hours.

Study of the commercial banking system. Survey of monetary policy and its relationship to individual banks and the banking system; analysis of the nature and functions of money and credit and the interrelationship of money, credit, and the price level; analysis of the sources and uses of funds by financial institutions; the economic role of these institutions.

FBE 322. Financial Management. 3 hours.

Policies and practices required to plan and control the sources and uses of a firm's funds; emphasis on formulation, implementation, and modification of corporate financial policies; management of liquid assets; selection among alternative investment opportunities; funds acquisition; dividend policies; determination of the optimal debt-equity mix. Economic, accounting, and statistical tools and concepts studied and related to the decision-making process. Prerequisite: Ac 313.

FBE 326. Law of Business Organization. 3 hours.

The law of agency; the master-servant relationship, including elementary labor law; the law of business organizations, including corporations, partnerships, and other forms of business association; applications of the Uniform Commercial Code to investment securities. Prerequisite: FBE 226.

FBE 340. Case Problems in Financial Management. 3 hours.

Analysis of selected problems in financial management of the firm, including short- and long-term financial requirements, trade credit analysis, special media of finance, capital budgeting, and profit analysis. Prerequisites: FBE 322.

FBE 363. Introduction to Investments. 3 hours.

Study of different types of bonds and stocks; various investment risks; securities market and market fluctuations; appraisal of the economy and industries; investment analysis of corporations and appraisal of their securities. Prerequisite: Ac 313, FBE 320, FBE 322.

FBE 407. Seminar. Hours to be arranged.

Foreign Commercial Law.

FBE 418. Law of Business Transactions. 3 hours.

Study of the several fields of law related to business: negotiable instruments; sales of personal property; real property, including landlord and tenant and mechanic's liens; security devices for credit transactions. Prerequisite: FBE 226, FBE 326.

FBE 420. Law of Administrative Agencies. 3 hours.

History and philosophy of administrative law; delegation of powers and scope of the administrative program as determined legislatively; promulgations and the right to be heard; administrative agencies that affect business; licensing bodies—development, powers, and procedures; zoning, planning, and the businessman; the role of the businessman as an interested party.

FBE 434. Business Enterprise and Social Responsibility. 3 hours.

Analysis of specific management policies as they relate to social objectives; patterns of governmental regulations; political activities of trade associations and other special-interest groups; relation of the growth of corporate enterprise to public policy and to the responsibilities of business management. Prerequisite: senior standing.

FBE 440. Real Estate Finance. 3 hours.

The role of mortgage lending in our economy; organization and operation of public and private lending agencies in the residential and commercial real estate markets; installment land contracts and trust deeds; legal aspects of real estate lending. Prerequisite: MIT 322 or consent of instructor.

FBE 450. Nonbank Financial Intermediaries. 3 hours.

Function, structure, portfolio composition, and investment and lending policies of financial intermediaries, such as savings and loan associations, sales finance companies, mutual savings banks, life insurance companies, leasing companies, pension plans, and credit unions. Impact of their operations on the money and capital markets. Prerequisite: FBE 320.

FBE 459. Financial Analysis. 3 hours.

Analysis of the financial aspects of complex business problems; diversified reading in the literature in the field; concepts of interest and opportunity cost; time value of money and valuation of various income streams; methods of evaluating and ordering investment alternatives; concepts of certainty, certainty-equivalence, and uncertainty related to financial decision making. Prerequisite: FBE 322.

FBE 464. Investment Management. 3 hours.

Study of the various individual and institutional investors, their financial requirements, and their ability to assume different types of investment risks; the determination of investment objectives and the execution of portfolio policies in the light of economic and security market conditions. Prerequisite: FBE 363, senior standing.

FBE 465. Investment Banking and Capital Markets. 3 hours.

Historical background of investment banking institutions; legal and regulatory problems of the origination, syndication, and distribution of security issues; methods of appraisal and valuation of the principal types of securities, including municipal and corporate bonds and common and preferred stocks.

FBE 466. Business Fluctuations and Expansion. 3 hours.

Designed to prepare the student to plan successfully in a dynamic business environment. Analysis of forces that cause pervasive fluctuations in aggregate business activity; the effects of these fluctuations on individual business firms and industries. The relationships among long-run trends and shorter cycles; forecasting techniques and policy measures. The growing impact of government decisions on the profits of a particular business and on price and income levels related to business actions such as inventory and investment policies which affect economic stability. Prerequisite: senior standing.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 304-306.)

FBE 460. Commercial Bank Management. (g) 3 hours.

Practices, policies, and problems of commercial bank management and operation; loan and investment administration; regulation and supervision; earnings, expense, and dividend policies; the economic and social importance of the commercial banking system as the center of the American financial system. Prerequisite: FBE 322; senior standing.

FBE 474. International Finance Management. (G) 3 hours.

The role played by commercial and central banks in various nations of the world; special emphasis on the methods by which these banks finance the international flow of goods, services, and investment. The instruments of foreign exchange, the setting of exchange rates, and the institutions, both national and international, which participate in the worldwide flow of funds and goods.

FBE 475. Foreign-Trade Marketing. (G) 3 hours.

Commercial policies of nations and their effects on the decision of foreign trading and investing business firms; composition of trade between nations

and stability; government controls and promotion; international commodity agreements; global and regional institutions; structural changes due to industrialization of emerging nations.

FBE 476. Foreign Business Operations. (G) 3 hours.

Determinants of foreign business decision making in light of case studies; operations versus licensing; control versus joint venture; problems of taxation, labor, and marketing; partners-in-progress approach; skill formation, managerial training, cooperation with national planning authorities; public development banks and industrial corporations; emphasis throughout upon the individual business unit.

Marketing, Insurance, and Transportation

THE EDUCATIONAL OBJECTIVES of the Department of Marketing, Insurance, and Transportation are: (1) to develop the student's understanding of the environment in which the firm operates; (2) to give the student an understanding of the interrelationships of marketing, insurance, transportation, and real estate with the other areas of operation of the firm; (3) to provide the student with the opportunity to apply the functions of management and to obtain experience in decision making in the areas of marketing, insurance, transportation, and real estate; and (4) to enable the student to develop his capacity for research and scientific analysis of basic problems in these areas.

The department offers major options in marketing, insurance, transportation, real estate, and business and construction.

Marketing. The option in marketing is designed to provide preparation for careers in the complex of functions in which the producer and the consumer are related. There are opportunities for student emphasis on sales and marketing management, marketing research, advertising, retailing, and foreign marketing. Special attention is given to the contributions of the behavioral sciences to the study of marketing. The program includes intensive study of the application of principles of management to marketing problems. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Marketing Management (MIT 324)	3
Marketing Research (MIT 415)	3
Marketing Analysis I (MIT 443)	3
Marketing Analysis II (MIT 444)	3
A minimum of 6 hours of the electives listed below	6
	<hr/> 18

ELECTIVES

Retail Administration (MIT 330)	3
Industrial Marketing (MIT 336)	3
Analysis of Consumer Behavior (MIT 341)	3
Seminars in Marketing (MIT 407)	3
Marketing Communications (MIT 442)	3
Cases in Forest Industries Management (MIT 470)	3
Foreign Trade Marketing (FBE 475)	3

Risk and Insurance. The specific goal of the risk and insurance option is to prepare students for careers in which a knowledge of risk, risk handling, and insurance is desirable. Opportunities for such careers exist in private industry and government and in the insurance industry itself. The risk and insurance program may be combined with work in other areas in business. The option emphasizes the broad role of risk and risk bearing in decision making. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Risk & Insurance (MIT 354)	3
Business Insurance & Risk Management (MIT 455)	3
Life & Health Insurance (MIT 456)	3
Social Insurance (MIT 458)	3
Electives in business courses	3
	15

Students who select the risk and insurance option, and who expect to enter actuarial and statistical work, should plan to supplement the requirements of this program with substantial work in mathematics and statistics.

Students interested in qualifying for certification as a C.L.U. (chartered life underwriter) or a C.P.C.U. (chartered property casualty underwriter) should consult their adviser concerning courses outside the School of Business Administration which are of special value in meeting the requirements for these certificates.

Transportation, Traffic Management, and Utilities. This option is designed to prepare students for careers with transportation or utility companies, for traffic or physical distribution (business logistics) positions with industrial or commercial firms or trade associations, and for governmental positions with regulatory or logistics agencies or publicly owned utilities. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Domestic Transportation & Distribution Management I (MIT 349)	3
Domestic Transportation & Distribution Management II (MIT 350)	3
International Transportation & Distribution Management (MIT 351)	3
Transportation Regulatory Laws & Procedures (MIT 451)	3
One of the following courses: Special Problems in Transportation Management (MIT 452); Public Utility Management (MIT 467); Seminar: Physical Distribution Management (MIT 407); Economics of Regulated Industries (Ec 463)	3
	15

Real Estate. The option in real estate is designed to provide professional training in the development, financing, marketing, and management of real estate. Requirements, in addition to the core program of the school, are listed below:

	Term Hours
Introduction to Real Estate & Urban Land Use (MIT 322)	3
Seminar: Property Valuation (MIT 407)	3
Advanced Real Estate & Urban Land Use (MIT 430)	3
Real Estate Finance (FBE 440)	3
One of the electives listed below	3
	15

ELECTIVES

Seminar: Real Estate Investment Analysis (MIT 407)	3
Commercial & Industrial Site Location (MIT 418)	3
Residential Property Development (MIT 431)	3

Business and Construction. A five-year program of study for students who plan to enter the construction industry is offered under the joint supervision of the School of Business Administration and the School of Architecture and Allied Arts. The program, which leads to the bachelor's degree in business administration, emphasizes courses in business methods and in the structural phases of architecture.

Requirements, in addition to the core program of the School of Business Administration, are listed below:

Lower Division	Term Hours
Design Studio I (Arch 187)	9
Graphics (Arch 231, 232, 233)	6
Essentials of Physics (Ph 101, 102, 103)	9

Upper Division	Term Hours
Introduction to Real Estate & Urban Land Use (MIT 322)	3
Advanced Real Estate & Urban Land Use (MIT 430)	3
Residential Property Development (MIT 431)	3
Principles of Cost Accounting (Ac 360)	3
Surveying for Architects (Arch 317)	2
Mechanical Equipment of Buildings (Arch 320, 321, 322)	9
Theory of Structures I (Arch 369, 370, 371)	12
Theory of Structures II (Arch 469, 470, 471)	9
Building Materials & Construction (Arch 420, 421, 422)	9
Real Estate Finance (FBE 440)	3
Electives in business and architecture (the courses listed below are recommended)	27

ELECTIVES

Domestic Transportation & Distribution Management I and II (MIT 349, 350)	6
Risk & Insurance (MIT 354)	3
Business Insurance & Risk Management (MIT 455)	3
History of Architecture I (Arch 337, 338, 339)	9
Theory of Structures III (Arch 472, 473, 474)	12
Commercial & Industrial Site Location (MIT 418)	3
Design Studio II (Arch 287)	9
City Planning I (LA 353, 354, 355)	6
Working Drawings and Specifications (Arch 417, 418, 419)	6
History of Architecture II (Arch 437, 438, 439)	9
Personnel Management (PIM 412)	3
Cases in Forest Industries Management (MIT 470)	3
Seminar: Methods-Time Management (MIT 407)	3
Case Problems in Financial Management (FBE 340)	3

LOWER-DIVISION COURSES

MIT 125, 126. **Environment of Business.** 3 hours each term.

The role and responsibilities of business in society; influence of the historical, social, political, and economic environments within which business operates; adjustments to changes in these environments; interrelationships of major functional areas of business.

UPPER-DIVISION COURSES

MIT 322. **Introduction to Real Estate and Urban Land Use.** 3 hours.

Real-estate principles and practices, with special emphasis on urban land-use analysis; nature of real property and property rights; organization of the real-estate industry and real-estate markets; the urban spatial structure and location analysis; land-use competition; management of real properties; subdivision and land development; real-estate financing; the impact of government policies upon the real-estate industry.

MIT 323. **Marketing Systems and Demand Analysis.** 3 hours.

The dynamics of demand; economic and behavioral approaches to the analysis of demand; purchase motivations—consumer versus industrial; flows of goods and services; nature of marketing institutions.

MIT 324. **Marketing Management.** 3 hours.

Role of the marketing function in the operations of a business firm; determination of the marketing mix; product policy and pricing; selection of channels of distribution; marketing communications; organizing, measuring, and controlling the marketing performance.

MIT 330. **Retailing Institutions in the Marketing System.** 3 hours.

Composition of the retailing structure; retailing and economic growth; productivity and efficiency of the retail sector; retail pricing; nonprice competition; retail organization and management; management science and retailing; retailing and the future.

MIT 336. **Industrial Marketing.** 3 hours.

The marketing problems of manufacturers of industrial goods, such as machinery and equipment, raw and semifabricated materials, industrial supplies, and component parts; special marketing problems of companies in the defense industry.

MIT 341. Analysis of Consumer Behavior. 3 hours.

The consumer-firm relationship analyzed through the application of concepts drawn from contemporary behavioral science to concrete business cases and practices; role theory, theories of attitude, change, and principles of perception given primary emphasis; analysis directed to advertising, display, layout, packaging, design of retail establishments, interpersonal relations of consumer and seller, and business "image." Prerequisite: Psy 201, 202 or Soc 204, 205, 206; Soc 300 or one 3-hour upper-division course in sociology; or consent of instructor.

MIT 349, 350. Domestic Transportation and Distribution Management. 3 hours each term.

Designed to acquaint the student with principles and practices of transportation and its role in the distribution process. The physical transportation plant of the United States and its performance; carrier responsibilities, services, and cooperation; economic and legal bases of rates, freight classification and tariffs; relationships between transportation and the location of economic activity; public policies regarding regulation, unification, labor-management relations, promotion, and similar transportation problems.

MIT 351. International Transportation and Distribution Management. 3 hours.

The role of the United States and world ocean and air transportation in international trade and development. Physical facilities; basic laws, policies, and associations affecting carrier and shipper operations; problems of international and intercarrier cooperation; principal trade routes and commodity flows; packaging, documentation, rates, and charters; marine and air cargo insurance; land-based supporting organizations, including terminal operations and connecting foreign land transportation systems. Emphasis on use of international transportation in export and import activities.

MIT 354. Risk and Insurance. 3 hours.

Introduction to the basic principles of insurance from the viewpoint of the consumer; risk and risk bearing; ways of handling risk; insurance as a device to handle risk; principles of insurance buying, including carrier and agency selection; major types of private insurance—life, property, and liability—with emphasis on the underlying economic problems each type is designed to meet; the insurance contract and its legal basis, with emphasis on the elements common to all insurance contracts; economic and historical significance of insurance; insurance regulation.

MIT 407. Seminar. Hours to be arranged.**MIT 415. Marketing Research.** 3 hours.

Influence of marketing research on the decision-making process; effect on the executive who must use it; uses and misuses. Problem formulation, exploratory research, research design, basic observational and sampling requirements, data analysis, interpretation, and reporting. Cases analyzed by students; each student develops a research project concerning a local firm. Prerequisites: BS 232, BS 333, MIT 323, MIT 324, or consent of instructor.

MIT 442. Marketing Communications. 3 hours.

Problems of marketing to consumers considered as problems in communication; advertising and sales promotion as formal channels of communication; economics of advertising and sales promotion; marketing communications as they relate to the public and to public policy. Prerequisite: MIT 341.

MIT 443. Marketing Analysis I. 3 hours.

Analytical methods for solution of marketing problems; including consideration of planning and forecasting; uncertainty and decision making; market position analysis; the marketing mix; design of market campaigns, facilities, organizations, and systems.

MIT 444. Marketing Analysis II. 3 hours.

Problem areas and problem-solving techniques in marketing. Analysis of marketing cases in product planning, pricing, distribution channels, consumer

attitudes, advertising, and personal selling. Simple marketing models; application of analytical tools developed in economics, mathematics, psychology, sociology, and other disciplines. Emphasis on the management decision-making process in marketing. Prerequisite: MIT 443.

MIT 470. Cases in Forest Industries Management. 3 hours.

General management problems in the forest products industries—lumber, plywood, pulp and paper, construction, and housing; marketing, production, finance, control, human relations; major emphasis on marketing problems. Cases, supplemented by field trips.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 306-307.)

MIT 418. Commercial and Industrial Site Location. (G) 3 hours.

Major principles and practices in the site-selection decision-making process, considered in the light of general location theory, the overall pattern of urban land use, specific types of business, consumer shopping behavior, real-estate considerations, and government policy; emphasis on problems of intraregional rather than interregional site selection and on urban developments.

MIT 430. Advanced Real Estate and Urban Land Use. (G) 3 hours.

Principles and practices of real-property valuation; factors affecting real-property values and incomes; relationship between land use and land values; the appraisal process; policies and problems of real-estate taxation; trends in real-property values and appraisal procedures. Prerequisite: MIT 322 or consent of instructor.

MIT 431. Residential Property Development. (G) 3 hours.

The process of residential property development; property development considered in terms of market analysis, site selection, land planning, arranging for utilities and services, financing and budgeting, public and private legal controls. Prerequisite: MIT 322.

MIT 451. Transportation Regulatory Laws and Procedures. (G) 3 hours.

The historical background and present status of state and Federal transport regulation, with particular attention to the Interstate Commerce Act and other pertinent Federal and state statutes. The organization and procedure of transport regulatory agencies, and the rules of practice before such bodies. Prerequisite: MIT 349, or MIT 350, or Ec 463, or consent of instructor.

MIT 452. Special Problems in Transportation Management. (G) 3 hours.

Carrier organization and management problems. Operational, personnel, financial, pricing, marketing, and related practices as influenced by competition and governmental policies. In addition to classroom work, each student makes a detailed study of a type of carrier or carrier problem related to his specific career interest. Prerequisite: MIT 349, or MIT 351, or consent of instructor.

MIT 455. Business Insurance and Risk Management. (G) 3 hours.

The more important methods of reducing business and personal risks from physical and moral hazards; major contracts of insurance to indemnify for losses from such perils as fire, windstorm, explosion, transportation, legal liability, dishonesty, and insolvency of others; loss adjustment practices, underwriting problems, reinsurance, rate making, consequential losses. Prerequisite: MIT 354 or consent of instructor.

MIT 456. Life and Health Insurance. (G) 3 hours.

The chief methods of handling personal risks, in business as well as individual application. Analysis of life insurance, annuity, and health insurance contracts from the viewpoint of the insurance consumer; legal and economic bases of life and health insurance; interpretation of major policy provisions; importance of rate making and reserve practices to the policy holder; integration of private policies with social-insurance coverages; estate planning and the role of income and estate taxation; business and personal uses of wills and trusts; settlement options; pension planning. Prerequisite: MIT 354 or consent of instructor.

MIT 457. Special Topics in Risk and Insurance. (G) 3 hours.

Analysis of underwriting capacity, writing powers of insurers, insurance of hold-harmless agreements, causes of insurer failure, insuring of special risks, selection of flexible forms of coverage, international insurance coverage, theory of regulation, tax problems in insurance.

MIT 458. Social Insurance. (G) 3 hours.

Analysis of the major kinds of compulsory insurance and their interrelations; old-age and survivors' insurance, unemployment insurance, workmen's compensation, nonoccupational disability insurance, and compulsory automobile insurance; comparison of social and private insurance. Prerequisite: MIT 354 or consent of instructor.

MIT 467. Public Utility Management. (G) 3 hours.

Review of historical and present regulatory laws, agencies, and procedures; problems and policies of municipal, state, and Federal ownership; management of various kinds of privately owned utility firms (electric, gas, communications, etc.). Organizational structures, price policies, marketing of services, short- and long-range planning, public relations. Particular emphasis on problems affecting the Pacific Northwest. Prerequisite: consent of instructor.

COURSES OFFERED ONLY IN EXTENSION**MIT 425. Real-Estate Fundamentals.** 3 hours (extension).**MIT 426. Real-Estate Practice.** 3 hours (extension).**MIT 427. Real-Estate Appraising.** 3 hours (extension).

Personnel and Industrial Management

THE EDUCATIONAL OBJECTIVE of the Department of Personnel and Industrial Management is to provide an understanding of basic management functions and techniques in the use of people, materials, and equipment in the operation of a business enterprise.

The department offers major options in production, personnel, management, and office administration.

Production. The production option provides specialized knowledge in preparation for careers in production management in manufacturing, with emphasis on such areas as methods-time analysis, production control, and quality control.

The major requirements for the production option, in addition to the core program of the school, are listed below:

	Term Hours
Elementary Inference in Business Statistics (BS 333)	3
Principles of Cost Accounting (Ac 360)	3
Production Management (PIM 329)	3
Operations Research Techniques (PIM 428)	3
Two of the following: Production Planning & Control (PIM 429); Seminar: Methods-Time Analysis (PIM 407); Seminar: Quality Control (PIM 407)	6
One of the following: Wage & Salary Administration (PIM 413); Problems in Production Management (PIM 430)	3
	21

Personnel. The personnel option is designed to prepare students for careers in personnel management and labor relations in business, government, and labor organizations. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Personnel Management (PIM 412)	3
Wage & Salary Administration (PIM 413)	3
Problems in Personnel Management (PIM 414)	3
Seminar: Personnel Psychology (PIM 407)	3
Organized Labor (Ec 445) or Labor Legislation (Ec 446)	3
	15

Management. The objective of the management option is to provide education in business administration with emphasis on management techniques in major areas, on the application of quantitative methods to managerial problems, and on an integrated view of business problems confronting top management and the ways in which they are solved. The major requirements, in addition to the core program of the school, are listed below:

	Term Hours
Production Management (PIM 329)	3
Office Organization and Management (PIM 333)	2
Personnel Management (PIM 412)	3
Operations Research Techniques (PIM 428)	3
Problems in Production Management (PIM 430)	3
Business Policies (PIM 453)	3
One of the following courses: Production Planning and Control (PIM 429); Seminar; Methods-Time Analysis (PIM 407); Seminar: Quality Control (PIM 407); Seminar: Organizational Psychology (PIM 407); Seminar: Personnel Psychology (PIM 407)	3
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Students who select the management option are required to take Business Policies (PIM 453) as a part of their senior core program.

UPPER-DIVISION COURSES

PIM 321. **Organization and Interpersonal Relations.** 3 hours.

Principles of management applied to commercial and industrial concerns; business planning, policy formulation, establishment of procedures, operations; theory and design of organizational structure; impact of work-flow plans, leadership patterns, and control systems upon human behavior.

PIM 323. **Business Machines.** 2 hours.

Study of ten-key and full-key adding machines and the rotary calculator; development of operating skills; practical applications to business procedures.

PIM 324, 325. **Office Practice.** 2 hours each term.

Advanced secretarial instruction; general secretarial duties, responsibilities, and procedures; different methods of duplicating; filing systems and their practical application to business; training in the operation of voice-writing machines.

PIM 329. **Production Management.** 3 hours.

Survey of planning, operations, and control of mass-production manufacturing; procurement, handling, and control of materials and control of quantity and quality. Ways of setting standards and improving methods; use of motion and time study; automation and automatic processing equipment. Supervision of operating employees and personnel relations as they affect production work. Emphasis on principles and relationships rather than specific techniques. Laboratory sessions (including field trips) illustrate selected methods, techniques, and management tools.

PIM 333. **Office Organization and Management.** 2 hours.

Management and organization of the office, with special attention to the scientific approach to analysis and control; functional office layout and equipment; selection, training, and supervision of office personnel; place of automation in the office; planning, organizing, and controlling office services, such as correspondence, records management, communications. Prerequisite: junior standing.

PIM 407. **Seminar.** Hours to be arranged.

Methods-Time Analysis.

Quality Control.

Organizational Psychology.

Personnel Psychology.

PIM 428. Operations Research Techniques. 3 hours.

Application of scientific techniques to the solution of complex business problems through the quantitative comparison of alternatives; linear programming, opportunity cost analysis, expected value analysis, decision-making processes.

PIM 430. Problems in Production Management. 3 hours.

A "model enterprise" built, and its production management problems analyzed, with the use of methods of operations research, statistics, and economics. Planned to acquaint the students with tools of scientific analysis and techniques of management which are applicable to problems in production management.

PIM 453. Business Policies. 3 hours.

The interdependence of the different departments of a business concern. Designed to provide an integrated view of business operations, and to coordinate the more specialized instruction of the school. Prerequisite: senior standing.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For 500 courses, open only to graduate students, see pages 307-309.)

PIM 412. Personnel Management. (g) 3 hours.

Personnel management in the modern business organization; personnel policies and practices conducive to good relations with employees; personnel problems of small organizations.

PIM 413. Wage and Salary Administration. (G) 3 hours.

Systematic administration of wages and salaries as a means of motivation and control in the business enterprise. Job analysis, description, and specifications; job evaluation methods; community wage and salary surveys; establishing wage structures by job evaluation and wage levels by collective bargaining and other methods; principles and administration of wage incentive plans; evaluating the results of wage incentives; compensating clerical, supervisory, and management personnel. Prerequisite: PIM 412 or consent of the instructor.

PIM 414. Problems in Personnel Management. (g) 3 hours.

Major areas of personnel policy determination, with special emphasis on relations with organized employees at the enterprise level and within the enterprise. The impact of union practices on personnel policy and procedures in both unionized and nonunion enterprises. Prerequisite: PIM 412 or consent of the instructor.

PIM 429. Production Planning and Control. (G) 3 hours.

Techniques for planning and control of the flow of materials into, through, and out of the industrial concern.

PIM 480. Business History. (G) 3 hours.

Evolving business systems in the changing American business environment since the colonial period; study of individual business firms and businessmen that illustrate these systems at critical times in their development; the results of decisions made at such junctures examined for their significance for business management.

Business Education and Secretarial Science

THE COLLEGE OF BUSINESS ADMINISTRATION offers major options in business teacher education and in office administration and service courses in secretarial science.

Business Teacher Education. The option in business teacher education provides a thorough background in business administration and professional courses in education to prepare students for the teaching of business and economic sub-

jects in the secondary schools. Two programs have been arranged, one emphasizing the teaching of secretarial subjects, the other emphasizing the teaching of bookkeeping and basic business; both programs offer preparation for the teaching of typing.

The requirements are as follows: (1) completion of the core program of the College of Business Administration, (2) the specialized courses listed below, (3) competence in the skill subjects prerequisite to Applied Stenography (SS 223), demonstrated by examination or by college-level courses, and (4) completion of the general requirements for secondary teacher certification.

	Term Hours
Principles of Business Education (BEd 421)	3
Business Education & the Community (BEd 422)	3
Typewriting for Business Teachers (BEd 371)	3
One of the following courses: Bookkeeping for Business Teachers (BEd 372); Shorthand for Business Teachers (BEd 373)	3
One of the following courses: Taxation & Business Policy (Ac 311); Business & Professional Correspondence (Wr 224)	3
	<hr/> 15

For certification as a teacher of business education in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation. The programs outlined above satisfy the state standards and the requirements for recommendation by the University of Oregon. For further information, the student should consult a member of the business education faculty who serves as adviser to prospective teachers.

Office Administration. The option in office administration is intended to develop in the student an understanding of scientific management systems as they apply to business problems, with particular emphasis on office systems and on the role of automatic data processing. The major requirements, in addition to the core program of the School of Business Administration, are as follows:

	Term Hours
Business and Professional Correspondence (Wr 224)	3
Office Organization & Management (PIM 333)	2
Office Practice (PIM 324)	2
Office Practice (PIM 325)	2
Personnel Management (PIM 412)	3
One of the following courses: Wage & Salary Administration (PIM 413); Problems in Personnel Management (PIM 414)	3
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Business Education

UPPER-DIVISION COURSES

Ed 371. Typewriting for Business Teachers. 3 hours.

Principles underlying development of typing skill; standards of achievement; methods and materials of instruction; selection of equipment; analysis of research studies in the field; individual technique improvement; laboratory. Prerequisite: consent of instructor.

Ed 372. Bookkeeping for Business Teachers. 3 hours.

Methods and materials of instruction; handling student differences; trends affecting teaching of bookkeeping. Prerequisite: consent of instructor.

Ed 373. Shorthand for Business Teachers. 3 hours.

Problems in the development of occupational proficiency in shorthand; standards of achievement; transcription problems; integration of shorthand, typing, and English; comparison and evaluation of methods; instructional materials; individual technique improvement. Prerequisite: consent of instructor.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

BEd 407. **Seminar.** (g) Hours to be arranged.

BEd 421. **Foundations of Business Education.** (g) 3 hours.

Objectives of business education; history, trends, issues; professional organizations; contribution of business education to general education; curriculum construction at the junior and senior high-school and junior-college levels; measurement in business education; administrative problems of supervision; significant related research. Prerequisite: senior standing, consent of instructor.

BEd 422. **Business Education and the Community.** (g) 3 hours.

Types of institutions offering business education; current educational attitudes of business and labor; community surveys and analysis of local needs; guidance programs; placement and followup; school and business standards; work experience programs; distributive-education programs on local, state and national levels; effects of automation on business education. Prerequisites: senior standing, consent of instructor.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

BEd 508. **Workshop.** Hours to be arranged.

Secretarial Science

LOWER-DIVISION COURSES

SS 10. **Beginning Typing.** No credit.

Principles of touch typing; emphasis on development of speed and accuracy. 5 hours laboratory.

SS 122, 123. **Advanced Typing.** 2 hours each term.

Typing of business letters, manuscripts, and various kinds of business forms development of speed and accuracy in production. 5 hours laboratory.

SS 126, 127, 128. **Stenography.** 3 hours each term.

Gregg shorthand. SS 126, 127 devoted to the study of basic shorthand theory SS 128 devoted to the development of speed in business letter dictation and transcription. Students must also take SS 122, 123, unless they have had equivalent training. Students who have had one year of high-school shorthand may not take SS 126 for credit. Section of SS 126 also offered in Brief hand, a system of abbreviating longhand, using only alphabetical characters 4 recitations.

SS 221, 222, 223. **Applied Stenography.** 3 hours each term.

Combination of shorthand, typewriting, and English into an employable skill emphasis on speed development in dictation and transcription; phrasing techniques, vocabulary development; efficient and correct procedures for the preparation of business letters, forms, manuscripts, and reports. Prerequisite: SS 128, SS 122, or equivalent. 4 hours recitation.

Graduate School Of Management and Business

THE GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS provides: (1) basic professional business education for entering students who have had little or no undergraduate work in business administration; (2) advanced work in general management and in business specialties for students who have completed an undergraduate major in business administration; and (3) preparation for career in college teaching and research.

Instruction is offered through the Graduate School of Management and Business in the fields listed below. In all fields, instruction in the College of Business Administration is supported by courses in cognate fields offered by other divisions of the University. The graduate program is accredited by the American Association of Collegiate Schools in Business.

Accounting—public, industrial, and governmental accounting.

Business Statistics—quantitative analysis for business decisions.

Finance—banking, investments, real estate, finance management.

Forest Industries Management—management of forest products industries (lumber, plywood, pulp and paper, construction and housing).

Managerial Economics—economic principles of business management, business planning, forecasting, business fluctuations.

International Business—finance, trade, management, foreign commercial law.

Risk and Insurance—risk management, personal and property insurance, pensions and group insurance, social insurance.

Marketing—marketing policies, marketing research, market communications, price and product policy, consumer behavior, industrial marketing.

Business Organization Theory—management functions, organizational conflict and change, leadership, group behavior.

Transportation—industrial traffic management, highway, rail, air, and ocean transportation, public utilities.

Production—operations research, production programming, industrial management, industrial structure and policy.

Personnel—selection, training, wage and salary administration, labor relations.

Information concerning financial aid available to graduate students is available on request at the Graduate School of Management and Business.

Research and Consultation. Faculty research interests include: impact of computerization, marketing forest products, labor benefit programs, gerontology, the commercial code, bank reserves, accounting theory, forecasting technique, role of the board of directors, consumer behavior, regional growth patterns, cybernetics, investment patterns, commodity flow trends, transportation pricing, and the impact of taxation on foreign trade. Faculty members are consultants to firms in a great many industries, to civic planning groups, and to Federal, state, and local governmental agencies.

Master's Program

THE GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS offers programs leading to the Master of Business Administration, Master of Science, or Master of Arts degree. The programs require four to six terms to complete, depending on the prior background of the student. For students entering with little or no undergraduate work in business, a total of 75 term hours of work is required, including a 30-hour preliminary core program, all or part of which may be waived for students who have had equivalent work as undergraduates.

Admission. For admission to the master's program, the student must satisfy the general requirements for admission to the Graduate School (see pages 13 ff), and must submit an acceptable score on the Admission Test for Graduate Study in Business, a letter of purpose, and three letters of recommendation.

Graduate work taken in summer sessions before a student is admitted formally to a graduate program in business must have prior approval of the dean in order to be counted as credit toward an advanced degree.

Preliminary Core Program. The first year of the master's program includes a series of core courses and two terms of work in Principles of Economics, planned especially for students whose undergraduate studies have been in fields other than business administration. For these students, the preliminary core program is required; all or part of the requirement may be waived for students who have had equivalent instruction as undergraduates. The preliminary core requirement is as follows:

	Term Hours
Accounting in Administration (Ac 511, 512).....	6
Statistics for Business Decisions (BS 511).....	3
Financial Environment (FBE 514).....	3
Financial Management (FBE 516).....	3
Legal Environment of Business (FBE 517).....	3
Industrial Administration (PIM 511).....	3
Administration of Marketing Function (MIT 511).....	3
Principles of Economics (Ec 201, 202).....	6
	<hr/> 30

Master of Business Administration. The program leading to the M.B.A. degree emphasizes the development of breadth of understanding of business problems and of general management skills; the program is well adapted to the needs of students who have earned their bachelor's degree in the social sciences, humanities, sciences, or engineering.

The requirements are: (1) completion of the preliminary core program or equivalent; (2) completion of a minimum total of 45 hours of graduate credit beyond the preliminary core program, of which a minimum of 36 hours must be in courses exclusively for graduate students (of the 36 hours, 30 must be in the College of Business Administration but not more than 18 hours in a field of specialization); (3) the 9 to 15 hours of remaining graduate credit are to be in business or related areas. A thesis is not required; if the student elects to submit a thesis, thesis credit (9 term hours) is counted as part of the 18-hour maximum in his field of specialization. Degree requirements within these general guidelines are further specified on a departmental basis.

All candidates for the M.B.A. degree are required to take a final written comprehensive examination, covering the field of specialization. A final oral examination is optional with the department in which the student is taking his major.

Master of Science or Master of Arts. The program leading to the M.S. or M.A. degree allows more specialization than the M.B.A. program, and is especially adapted to the needs of students interested in careers in accounting, business statistics and research, and industrial management.

The requirements are: (1) completion of the first-year core program or equivalent; (2) a minimum of 45 term hours, including completion of a major in a specialized area of business, normally 15 hours; (3) a thesis, 9 term hours, in the area of specialization; (4) completion of a minor in the school or in a cognate field (minimum, 12 term hours); (5) for the M.A. degree, competence in a foreign language.

Candidates for the M.S. or M.A. degree are required to take a final written comprehensive examination covering the major field of specialization and an oral examination on the thesis.

Minor in Business Administration. A master's candidate with a major in another field may elect a minor in business administration. The minor generally consists of the preliminary core. Minor programs must be reviewed by the school before course work is taken.

Forest Industries Management. The College of Business Administration, through the Forest Industries Management Center, offers graduate work leading to the Master of Business Administration degree with a major in forest industries management. This program is designed to train students for management careers in the forest products industries—lumber, plywood, pulp, and paper—as well as for government careers in this field.

The program is interdisciplinary in nature. It includes course work in all departments within the College of Business Administration as well as courses in other divisions of the University. The program is administered by an interdepartmental committee.

The option in forest industries management is normally open only to students with undergraduate degrees in forestry. It emphasizes general management issues of forest products companies, as well as problems in the particular functional areas of marketing, transportation, production, accounting and statistics, and finance. Attention is also given to the development of skills in the application of quantitative techniques to the solution of forest management and business management problems.

The major requirements, in addition to the regular M.B.A. preliminary core program, are listed below:

	Term Hours
Introduction to Numerical Computation (Mth 233) (no credit)* .....	..
Seminar: Computer Management (PIM 507)	3
Seminar: Operations Research <i>or</i> Production Control (PIM 507)	3
Problems in Industrial Marketing (MIT 530)	3
Problems in Forest Industries Management (MIT 540)	3
Problems in Business Planning & Forecasting (FBE 530) <i>or</i> International Business Operations (FBE 476) <i>or</i> Problems in Business Finance (FBE 540)	3
Administrative Control (Ac 540) <i>or</i> Cost Analysis and Interpretation (Ac 562)	3
	<hr/> 18

The student takes 27 term hours in addition to the 18 hours listed above. These courses may be either within or outside of the College of Business Administration. The particular courses selected vary depending upon the student's undergraduate major within the general field of forestry. Courses are chosen with the guidance and approval of the interdepartmental committee. Following is a list of suggested courses:

Computing (Mth 444)	Transportation Theory and Practice (MIT 549)
Production Programming (PIM 530)	Quantitative Analysis for Business Decisions (BS 432)
Personnel Administration (PIM 534)	Industrial Dynamics (BS 435)
Seminar: Marketing Research (MIT 507)	Building Materials & Construction (AA 420)
Pricing Policies (MIT 521)	Regional Economics (Ec 414, 415, 416)
Seminar: Physical Distribution Management (MIT 507)	Economy of the Pacific Northwest (Ec 418)
	International Economics (Ec 440, 441, 442)

For students who have not already had courses in these areas as undergraduates, the following additional courses are also suggested (to be taken at the School of Forestry, Oregon State University in Corvallis, through joint campus registration):

Forest Economics (F 412)	Industrial Forestry (F 427)
Forest Management (F 425)	Multiple-Use Management (F 522)

In the courses listed above, the students are required to write major term papers or case reports relating the contents of the courses to problems and issues of the forest industries. Copies of these papers are to be furnished to the Director of the Forest Industries Management Center at the time of submission to the particular course instructors.

* Students who can demonstrate a proficiency in computer programming may be excused from this course.

Business Education. The College of Business Administration offers graduate work leading to the Master of Science degree with a special field: Business Education. The program provides the opportunity for a student to take work in Business Education, some in Business Administration, and some in Education or in an elective field. A thesis based on an area of interest to the student in Business Education is also a part of the program.

The student's specific program will depend to a great extent upon his background and needs. Careful advising will prepare the individual for the program best suited to his teaching goals.

Doctoral Program

THE GRADUATE SCHOOL OF MANAGEMENT AND BUSINESS offers a program of advanced graduate study and research leading to the degree of Doctor of Business Administration, for students preparing for careers in college teaching and administration and for responsible research positions in business and government.

Admission. For admission to the doctoral program, the student must (1) satisfy the admission requirements of the Graduate School, (2) have the background of graduate work required for a master's degree in business administration, and (3) show evidence of exceptional academic promise.

Degree Requirements. The requirements for the D.B.A. degree are as follows: (1) completion of a minimum of 63 term hours of work above the level expected for a master's degree in business administration; (2) completion of a minimum of 9 term hours of work in each of the following areas: business organization theory and policy; a major functional area of business; statistics and quantitative control; Advanced Economic Theory (Ec 458, 459, 460); a field of study other than business; (3) submission of a thesis presenting an original and major contribution to an understanding of the thesis subject, for a minimum of 18 term hours of credit (the student must enroll for 3 term hours of thesis in each term the thesis is uncompleted after he has passed his comprehensive examinations, up to a maximum of 36 term hours); (4) examinations, including (a) a qualifying examination, normally taken during the student's second term of doctoral studies, (b) written comprehensive examinations taken not less than one academic year before the student expects to complete work for the degree, and (c) a final oral defense of the thesis.

Reading knowledge of foreign languages is not required.

Research. Doctoral candidates are expected to become actively engaged in the research program of the school. Opportunities for research experience are provided in connection with projects of individual faculty members, and in the Bureau of Business and Economic Research, Center for International Business Studies, the Forest Industries Management Center, and the Transport and Logistics Research Center.

Graduate Courses

Accounting and Business Statistics

*Ac 501. **Research.** Hours to be arranged.

*Ac 503. **Thesis.** Hours to be arranged.

* No-grade course.

Ac 507. **Seminar.** Hours to be arranged.

Development of Accounting Thought.
Managerial Cost and Budget Analysis.

BS 507. **Seminar.** Hours to be arranged.

Dynamic Time—Dependent Processes.
Sampling Techniques.
Quantitative Analysis for Business Decisions.

Ac 511, 512. **Accounting in Administration.** (p) 3 hours each term.

Accelerated introduction to principles and procedures of accounting and the use of accounting data as a basis for business decisions; intensive survey of the data-creating process followed by study of asset valuation, income measurement, cost analysis and control, and budgeting. Open only to graduate students who have not completed a college-level course in accounting.

BS 511. **Statistics for Business Decisions.** (p) 3 hours.

Accelerated study of business statistics; decision theory applications in business; probability, estimation, hypothesis testing, uses of subjective probability, introduction to regression analysis. Open only to graduate students who have not completed BS 232, BS 333 or equivalent. Prerequisite: one year of college mathematics.

Ac 540. **Administrative Control.** 3 hours.

Descriptive cybernetics and the concept of control as a property of all organized behavior; control attitudes and practices in human organizations; traditional and emerging views of the role of control in administration; problems of performance measurement; military command and control systems; rudiments of information and communication theory; computer abuses; role of man in a controlled system; student papers usually theoretical and related to major fields.

Ac 542. **Accounting Verification.** 3 hours.

Analysis of the problems encountered in examining and reporting on the financial statements of a business enterprise, verification standards, theory and application of sampling techniques, problems posed by data-processing machine systems, innovations in auditing concepts; selection, scope, and application of auditing procedures in the continued examination approach. Prerequisite: Ac 440, 441.

Ac 552. **Accounting Theory.** 3 hours.

Examination of some of the elements of the conceptual framework underlying financial accounting reports, viewed in part as a postulate structure, in part as a series of decisions as to how and when changes in assets and liabilities shall be recognized. Readings in accounting literature, study of some current controversial areas in financial accounting theory. Course content varies somewhat from year to year with changing interests of participants. Prerequisite: Ac 450.

Ac 562. **Cost Analysis and Interpretation.** 3 hours.

Theory of cost analysis and the problem of determining cost for various decision-making purposes; the function of the comptroller in management planning and control, marginal and differential costs, the joint-cost problem, direct costing, budgeting, intrafirm pricing and pricing policy. Readings in cost accounting literature and case studies. Prerequisite: Ac 361.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

Ac 508. **Workshop.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see pages 284-285.)

Ac 411. **Federal Income Tax.** (G) 3 hours.

Ac 412. **Federal Income Tax Procedure.** (G) 3 hours.

Ac 420, 421. **Management Information Systems.** (G) 3 hours each term.

- Ac 430. **Fund Accounting.** (G) 3 hours.
BS 432. **Quantitative Analysis for Business Decisions.** (G) 3 hours.
BS 433. **Applied Analysis of Variance.** (G) 3 hours.
BS 434. **Applied Regression Analysis.** (g) 3 hours.
BS 435. **Industrial Dynamics.** (G) 3 hours.
Ac 440, 441. **Accounting Verification.** (G) 3 hours each term.
Ac 450, 451. **Special Topics in Accounting.** (G) 3 hours each term.
Ac 480, 481. **Advanced Accounting Problems.** (G) Hours to be arranged.

Finance and Business Environment

*FBE 501. **Research.** Hours to be arranged.

*FBE 503. **Thesis.** Hours to be arranged.

FBE 507. **Seminar.** Hours to be arranged.

FBE 514. **Financial Environment.** (p) 3 hours.

The financial system as an external environment affecting business and financial decisions. Characteristics of the overall financial system of an enterprise economy; nature and functions of money and credit, and their influence on product demand and the supply of finance from the standpoint of the individual business; roles of monetary and fiscal policy, debt management, and the money and capital markets.

FBE 516. **Financial Management.** (p) 3 hours.

Objectives, tools, methods, and problems of financial management from the viewpoint of the firm; special problems, including funds acquisition, dividend policy, capital acquisitions, taxes, mergers, forecasting, and investment banking.

FBE 517. **Legal Environment of Business.** (p) 3 hours.

Designed to provide a basic legal background for the study of business administration; contracts, agency, business organization, and fields within the framework of the Uniform Commercial Code; international aspects of law and business.

FBE 519. **Business Ethics.** 3 hours.

Ethical and social obligations which businessmen are expected to assume; critical consideration of presuppositions, opinions, and practices manifest in business enterprise and in business education.

FBE 520. **Methods in Business Research.** 3 hours.

Research techniques in business; project design, analysis of data.

FBE 525. **Managerial Economics.** 3 hours.

The varied forms in which economic concepts appear in the operation of individual business units; emphasis on the approach to problems of management decision making and forward planning through formulation of problems in a conceptually quantitative manner capable of numerical solution. Integration of economic principles with various areas of business administration; the role of uncertainty given particular attention.

FBE 530. **Problems in Business Planning and Forecasting.** 3 hours.

Establishment of business plans for expansion and development on the basis of economic and market data; planning fundamentals, forecasting procedures, interrelations of marketing, financial and personnel planning, organization of the planning and forecasting process; theories of business cycles and economic growth.

* No-grade course.

FBE 540. Problems in Finance. 3 hours.

Finance function and its relationship to the firm's objectives; asset valuation; profit analysis; choice of capital acquisitions under uncertainty; the influence of the capital structure, dividend policy, and growth on the cost of capital; maximization of stock value; cash flow models of the firm; decision rules for controlling investment in receivables and inventories.

FBE 545. Theory of Finance. 3 hours.

Application of financial principles to business problems such as: evaluation of financial objectives; dividend policies; analysis of capital acquisitions; specialized financing media; problems of valuation, merger, and reorganization; role and behavior of capital markets; analysis of cases.

FBE 550. Foreign Commercial Law. 3 hours.

Basic legal concepts applicable to commercial transactions in foreign trade; comparison of commercial law and legal institutions of foreign countries and the United States; major legal systems, including civil law, Islamic law, and common law; legal documents involved in foreign-trade transactions; anti-trust problems in international trade.

FBE 565. Investment Analysis. 3 hours.

Comprehensive analysis of specific industries; critical evaluation of firms within these industries; comparative analysis of these firms' securities and their potential contribution to stipulated investment objectives. Prerequisite: FBE 464 or equivalent.

FBE 566. Investment Administration. 3 hours.

Development of sound principles of investment management: relation of investment policy to money and capital markets and business fluctuations; selection of securities for investment portfolios in the light of long- and short-range objectives of the investor. Prerequisite: FBE 464 or equivalent.

FBE 570. Commercial Banking. 3 hours.

The role of commercial banks in the economy as suppliers of credit to consumers, business firms, and governments; emphasis on factors involved in managing the sources and use of funds, bank liquidity, and efficacy of the banking structure; analysis of loan and investment policies, capital structure and adequacy, supervision and regulation, and profitability.

FBE 571. International Finance and Investment. 3 hours.

The international monetary system; balance of payments; liquidity; foreign-exchange market; foreign investment; international and regional financial institutions. Not open to students who have taken FBE 474.

FBE 572. International Commercial Relations. 3 hours.

Commercial documents; United States trade patterns, composition, and structure; United States commercial policy; international trade organizations; regional trade groupings; trade of emerging nations. Prerequisite: FBE 571. Not open to students who have taken FBE 475.

FBE 573. International Business Operations. 3 hours.

Functional management within multinational corporations; case studies of operations abroad; focus on managerial decision making. Prerequisite: FBE 572. Not open to students who have taken FBE 476.

FBE 575. The Money Market. 3 hours.

Money-market instruments and institutions, and the part they play in the money market of the nation; analysis of the factors that influence the cost and availability of credit and money, including the influence of the Federal Reserve System and the Treasury. The aim is to develop an ability to analyze and appraise money-market trends and developments.

FBE 580. Government and Private Financial Institutions. 3 hours.

The place and functions of government and private financial institutions in a business economy; emphasis on their influence in the saving-investment process and on the implications of their lending and investing policies on the

level of employment and allocation of resources; current problems and prospective developments.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION

FBE 508. **Workshop.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see pages 288-289.)

FBE 460. **Commercial Bank Management.** (g) 3 hours.

FBE 474. **Foreign Exchange and International Finance Management.** (G) 3 hours.

FBE 475. **Foreign-Trade Marketing.** (G) 3 hours.

FBE 476. **Foreign Business Operations.** (G) 3 hours.

Marketing, Insurance, and Transportation

*MIT 501. **Research.** Hours to be arranged.

*MIT 503. **Thesis.** Hours to be arranged.

MIT 507. **Seminar.** Hours to be arranged.

Marketing Theory.
Transportation Problems.
Physical Distribution Management.
Marketing Research.
Product Innovation.
Entrepreneurship.
Urban Land Utilization.
Real Estate Investment Analysis.

MIT 511. **Administration of the Marketing Function.** (p) 3 hours.

Environment of marketing decisions; design of a marketing program; nature and behavior of markets; marketing planning; product, channel, pricing, and promotion decisions; marketing and the law; evaluating marketing efficiency.

MIT 520. **Marketing Problems and Policies.** 3 hours.

Marketing and formal planning; uncertainty and decision making; marketing position analysis; problems in the management of the marketing mix; design of marketing campaigns, facilities, organization, and systems; evaluation of marketing performance.

MIT 521. **Pricing Policies.** 3 hours.

The development of individual company pricing policies; intra-industry pricing policies and their competitive aspects; influence of trade associations in price determination; legislation and pricing; effect of specific court rulings on price policy.

MIT 530. **Problems in Industrial Marketing.** 3 hours.

The marketing of industrial goods; environmental effects on marketing; major issues of product policy, pricing, marketing programs, and marketing organization.

MIT 540. **Problems in Forest Industries Management.** 3 hours.

Historical, economic, social, and technological factors affecting the current and future operations of the forest products industry.

MIT 549. **Transportation Theory and Practice.** 3 hours.

For graduate students with little or no undergraduate background in transportation. Two hours of lecture-discussion weekly, plus individual consultations. Extensive reading.

* No-grade course.

MIT 555. Risk and Insurance Theory. 3 hours.

Major problems of insurance theory; mathematical, psychological, economic, statistical, and legal aspects; relation of business organization to theory in risk and insurance; application of theory to practical problems of insurers and the insured.

MIT 556. Pensions and Group Insurance. 3 hours.

Economic and business conditions giving rise to the pension movement. The role of private pension plans and group life and disability insurance in overall employee benefit plans. Funding, tax, actuarial, and legal problems in pensions and group insurance. Profit-sharing and labor-negotiated plans. Case studies of industrial retirement plans.

MIT 557. Analysis of Business Risk. 3 hours.

The risk-management concept; corporate organization for insurance and risk management; analysis of exposure to loss; self-insurance versus commercial insurance; control of commercial insurance costs; use of captive insurers.

MIT 561. Analysis of Consumer Behavior. 3 hours.

Behavioral-science concepts utilized in the analysis of life-style patterns of the ultimate consumer; values and behavioral patterns of consumer segments, and their significance for marketing. Not open to students who have taken MIT 341. Prerequisite: Soc 204, 205, 206, or Soc 300, plus one 3-hour upper-division course in sociology, or consent of instructor.

MIT 562. Marketing Communications. 3 hours.

Analysis of the environmental conditions that enhance or inhibit the firms' attempt to design and use the most effective communication for demand cultivation. Prerequisite: MIT 561. Not open to students who have taken MIT 341.

MIT 563. Marketing Concepts and Theory. 3 hours.

Application of theoretical concepts in the social sciences to the development of a theory of marketing. Prerequisite: 9 hours of graduate work in marketing; consent of instructor.

COURSE OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION**MIT 508. Workshop.** Hours to be arranged.**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT**

(For descriptions, see pages 293-294.)

MIT 418. Commercial and Industrial Site Location. (G) 3 hours.**MIT 430. Advanced Real Estate and Urban Land Use.** (G) 3 hours.**MIT 431. Residential Property Development.** (G) 3 hours.**MIT 451. Transportation Regulatory Laws and Procedures.** (G) 3 hours.**MIT 452. Special Problems in Transportation Management.** (G) 3 hours.**MIT 455. Business Insurance and Risk Management.** (G) 3 hours.**MIT 456. Life and Health Insurance.** (G) 3 hours.**MIT 457. Special Topics in Risk and Insurance.** (G) 3 hours.**MIT 458. Social Insurance.** (G) 3 hours.**MIT 467. Public Utility Management.** (G) 3 hours.**Personnel and Industrial Management*****PIM 501. Research.** Hours to be arranged.***PIM 503. Thesis.** Hours to be arranged.

* No-grade course.

PIM 507. Seminar. Hours to be arranged.

Research Design.
Computer in Business.
Comparative Management Systems.
Quality Control.
Methods and Time Analysis.
Operations Research Applications.
Administrative Communication.
Collective Bargaining.
Administration of Labor Market Policies.

PIM 511. Industrial Administration. (p) 3 hours.

Concepts and techniques basic to sound industrial administration; scientific management, technological change, organization structure and dynamics, decision making; techniques of production control, work measurement, statistical quality control, newer quantitative tools such as linear programming. Case studies.

PIM 528. Concepts in Industrial Management. 3 hours.

Analysis of such organization parameters as capacity, control, authority, productivity, etc.; impact of managerial policies and practices on these concepts.

PIM 530. Production Programming. 3 hours.

Analysis of schematic and mathematical models in the allocation of productive resources in the manufacturing process; linear programming, statistical techniques, and other quantitative norms applied in production control, equipment replacement analysis, economic lot size determination, and quality control. Not open to students who have taken PIM 429.

PIM 531. Theory of Business Organization. 3 hours.

The role of theory in the social sciences; research and theory dealing with organizational structure, leadership, communication, evaluation, decision making, control; an attempt to integrate traditional and behavioral-science approaches to organization and organizational behavior.

PIM 532. Problems in Business Policies. 3 hours.

Business policy formulation considered as a derivative of corporate objectives and philosophy; emphasis on the effects of intra- and extra-organizational forces which require periodic policy modifications. Analysis of specific case illustrations on a company and an industry basis. Research into the conceptual and operational ramifications of a current problem.

PIM 533. Theory of the Industrial Work Group. 3 hours.

Major theories of group formation and behavior considered in terms of their implications for business management; analysis of the literature concerning supervisory behavior and leadership, characteristics of managers, group cohesiveness, conformity, productivity standards, problem-solving efficiency, and morale.

PIM 534. Personnel Administration. 3 hours.

Mobilizing and deploying the human resources of the enterprise, from the standpoint of the personnel-administration specialist; employment, training, evaluation, wage and salary administration; labor relations from the standpoint of the firm; specialist contributions to personnel programs.

PIM 535. Personnel Psychology. 3 hours.

Analysis of studies in psychological literature concerning techniques of personnel selection and screening, methods of evaluating employee and managerial performance, training and management development, effects of working conditions on performance, job and equipment design in relation to employee characteristics, and attitude and morale measures.

PIM 536. Organizational Conflict and Change. 3 hours.

Factors contributing to internal conflict and to changed patterns of behavior within organizations, from the viewpoint of business management; managerial decision making and conflict; implications of cultural values for the admin-

istration of scientific research groups; labor-management conflict; coercion and manipulation; planned change.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

(For descriptions, see page 296.)

PIM 412. **Personnel Management.** (g) 3 hours.

PIM 413. **Wage and Salary Administration.** (G) 3 hours.

PIM 414. **Problems in Personnel Management.** (g) 3 hours.

PIM 429. **Production Planning and Control.** (G) 3 hours.

PIM 480. **Business History.** (G) 3 hours.

School of Community Service and Public Affairs

NORMAN D. SUNDBERG, Ph.D., Dean of the School of Community Service and Public Affairs.

HERBERT BISNO, M.S.W., Chairman, Community Service Programs and Chairman, Curriculum Advisory Committee.

VICTOR K. JENSEN, M.S.W., Director, Field Instruction, Community Service Programs.

JAROLD A. KIEFFER, Ph.D., Chairman, Public Affairs and Administration Programs.

JOHN B. COLLINS, M.G.A., Director, Field Instruction, Public Affairs and Administration Programs.

SUSAN K. GILMORE, Ph.D., Director, Office of Career Counseling.

DONALD N. JOHNSON, B.A., Acting Director, Bureau of Governmental Research and Service.

EDGAR BREWER, M.A., Continuing Education and Conference Planning Officer.

Professors: HERBERT BISNO, J. A. KIEFFER, N. D. SUNDBERG, C. E. THURBER.

Associate Professors: E. W. BREWER, ORVAL ETTER, EVAN IVERSON.

Assistant Professors: J. R. ACKER, J. B. COLLINS, C. E. DEBERRY, SUSAN K. GILMORE, J. R. HOWARD, V. K. JENSEN, ADELL McMILLAN, C. M. SALTVEIT, J. R. WISH.

Instructors: J. H. GODDARD, MYRA MILLER.

Lecturer: K. D. VIEGAS.

THE SCHOOL OF COMMUNITY SERVICE AND PUBLIC AFFAIRS was organized in 1967 as a professional school with the aim of preparing both undergraduate and graduate students for careers as paid or as volunteer workers in areas of public and community service. Graduates of the school will work in such areas of service as the following: local and state governments, and the Federal government; corrections; rehabilitation for disabled persons; urban and regional planning; international development and foreign service; assistance to the aged; mental retardation; public welfare; community arts center management; recreation and park management; special anti-poverty programs; peace corps. After graduation, students may elect to go into work that serves the public directly, or they may prefer to work in an administrative capacity in support of such activities. Some students may choose graduate study.

The faculty and staff of the school are drawn from all the broad disciplines of the University and include qualified practitioners now serving in public and private agencies. Students are offered a liberal education as well as professional courses opportunities to observe and evaluate the problems of public and private service agencies. Students will work in such agencies prior to completing their academic studies.

The school also offers courses for persons who require additional studies after they have begun employment. These are in the form of refresher courses, professional conferences, and special training sessions. Counseling is available to persons who wish to resume academic work after long periods of interruption, in order to help them clarify career objectives.

Degrees. The School of Community Service and Public Affairs offers Bachelor of Arts and Bachelor of Science degrees.

Major Requirements. The group requirements for the School of Community Service and Public Affairs are like those of the other professional schools of the University (see page 93). In all cases degree candidates are expected to satisfy the following minimum requirements:

General knowledge areas. The student must have a basic understanding of the broad areas of knowledge in the social and behavioral sciences. The school relates basically to the social sciences, but the student will be taking work in the humanities, fine arts, and sciences which will contribute to his understanding of problems in public service and increase his ability to apply creative solutions to them.

Specific knowledge and skill areas. In addition to the general areas listed above, the student should demonstrate competence in these specific content fields: advanced social psychology; social problems; individual and group differences; abnormal psychology; basic legal and administrative concepts, functions, and processes; statistics; research design methods, and techniques. Each student is expected to carry out a satisfactory field instructional assignment and to develop an understanding in depth of some aspect of community service and public affairs.

Most students in the School of Community Service and Public Affairs will be able to meet the content requirements by taking courses listed below:

(1) At least one course in each of the following: anthropology, economics, political science, psychology, sociology, and international relations. These courses may be taken within the framework of the appropriate group requirement sequences.

(2) A course covering research design and methods.

(3) A course in quantitative methods or statistics.

(4) An upper-division course in social psychology (Psy 437 or Soc 334, 335).

(5) Social Problems (Soc 305).

(6) Group and Individual Differences (Psy 441).

(7) Abnormal Psychology (Psy 450).

(8) Law, its Processes and Functions (L 430).

(9) The Social Welfare Institution (Soc 467, 468, 469).

(10) Career Analysis (CSPA 281, 282).

(11) Public Administration Concepts (CSPA 321, 322).

(12) Practices in Community Service and Public Affairs (CSPA 411).

(13) Supervised Field Study (CSPA 409).

(14) At least two CSPA electives.

The student with prior work and study experiences considered equivalent to certain of the above content areas may, with the consent of his adviser, propose alternatives if the objectives of the school and those of the student can be met satisfactorily in doing so.

Certificate Program. A student with a bachelor's degree from another school or department may earn a certificate from the School of Community Service and Public Affairs after having completed a prescribed course of study in the school. In general, all candidates for certificates must take the following program (or its equivalent):

(1) Practices in Community Service and Public Affairs (CSPA 411).

(2) Supervised Field Study (CSPA 409).

(3) A minimum of 18 hours of upper-division course work covering content required of school majors.

The certificate program is designed to offer students working in other fields a form of recognition for having qualified in a field of emphasis in the school. Such certificates will be awarded by the school at regular commencement exercises of the University or at other times.

LOWER-DIVISION COURSES

CSPA 281, 282. **Career Analysis.** 2 hours each term.

Examination of personal and environmental factors influencing career choice; survey of careers related to community service and public affairs; considerations in future career planning.

UPPER-DIVISION COURSES

CSPA 321, 322. **Public Administration Concepts.** 3 hours each term.

An introductory course designed to provide an understanding of concepts, processes, and methods involved in the administration of public agencies and institutions.

CSPA 401. **Research.** Hours to be arranged.

CSPA 403. **Thesis.** Hours to be arranged.

CSPA 405. **Reading and Conference.** Hours to be arranged.

CSPA 406. **Special Problems.** Hours to be arranged.

CSPA 407. **Seminar.** (g) Hours to be arranged.

Metropolitan Government.

Black Power and Urban Unrest.

Consumer Problems of the Poor.

CSPA 408. **Workshop.** (g) Hours to be arranged.

*CSPA 409. **Supervised Field Study.** Hours to be arranged (15 hours maximum credit).

Participation in the activities of community, social, and administrative agencies and institutions, under close supervision; coordinated instruction. Prerequisite: consent of instructor.

CSPA 411. **Practices in Community Service and Public Affairs.** 3 hours.

Designed to provide an introduction to the organization, character, and conduct of community and public-agency programs as a link between theoretical concepts and participation in field study.

Bureau of Governmental Research and Service

DONALD N. JOHNSON, B.A.	Acting Director
HERMAN KEHRLI, M.A.	Research Associate
EVAN A. IVERSON, Ph.D.	Research Associate
ARNOLD M. WESTLING, B.S.	Planning and Public Works Consultant
KENNETH C. TOLLENAAR, M.A.	Research Associate
GEORGE N. PLATT, B.S., LL.B.	Research Attorney
W. ED WHITELAW, B.A.	Research Associate
DONALD C. ASHMANSKAS, B.A., LL.B.	Research Assistant
JOSEPH T. HENKE, B.A., LL.B.	Research Assistant
DONALD E. CARLSON, M.P.A.	Research Assistant in Charge of Portland Office

* No-grade course.

JAMES M. MATTIS, B.A., LL.B.....Legal Assistant
 ROBERT E. KEITH, M.Arch.....Associate Director, Urban Planning Assistance Program
 ROBERT S. PARKER, M.A.....Assistant Coordinator, Urban Planning Assistance Program

Planning Consultants: MARVIN E. GLOEGE, M.A., TONY N. KOM, M.L.A.; J. DAVID ROWE, B.A.; CYRUS R. NIMS, B.Arch. (Portland).

Associate Planners: EDWARD G. WATSON, M.A.; HERBERT K. BEALS, B.A. (Portland); CHARLES E. OLSON, B.A. (Portland); KENNETH W. SWEENEY, B.S. (Pendleton).

Assistant Planners: KAREN M. SEIDEL, B.A.; J. FRANK THIEBEAU, M.A.

Planning Technicians: LYNN D. STEIGER, B.B.A.; KERRY L. LAY, B.S. (Tillamook).

THE BUREAU OF GOVERNMENTAL RESEARCH AND SERVICE, as an arm of the School of Community Service and Public Affairs, conducts research in the fields of public administration, public finance, public law, and public planning related generally to problems of state and local government. It also provides consultation and information service to local officials and provides technical service and liaison in areas of intergovernmental relations. The bureau has been designated by the Oregon legislature to administer the Federal program of urban planning assistance to city, county, and regional planning agencies in Oregon.

It provides an information and liaison service in regard to Federal aid programs for counties, cities, and special districts. The bureau cooperates with local government agencies in the development of programs. It works with local officials in sponsoring institutes, conferences, and regional in-service training programs.

An extensive library of periodicals, pamphlets, and reference materials is maintained for use by students, faculty members, state and local officials and employees, and civic groups. Reference files are maintained on subjects relating to state and local government. The bureau answers inquiries from individual public officials and employees and civic groups.

The bureau works in close cooperation with such organizations of public officials as the Association of Oregon Counties, the League of Oregon Cities, the Oregon Finance Officers Association, the Oregon Chapter, International City Managers Association, the Oregon Chapter, American Public Works Association, the Oregon Association of City Police Officers, and others.

Dental School

LOUIS G. TERKLA, D.M.D., Dean of the Dental School.

EUGENE W. BAUER, B.S., Assistant Dean for Business Affairs.

ERNEST A. HURLEY, D.M.D., Registrar.

ROBERT M. DONNELL, M.A., Librarian.

THE UNIVERSITY OF OREGON DENTAL SCHOOL, located in Portland, was established through an act of the 1945 Oregon Legislature; the act accepted the gift of the property of the North Pacific College of Oregon, and incorporated the college into the Oregon State System of Higher Education as a school of the University. The North Pacific College was the outgrowth of the merger in 1900 of the Tacoma Dental College (founded in 1893) and the Oregon College of Dentistry (founded in 1898).

The Dental School offers a professional curriculum in dentistry, leading to the degree of Doctor of Dental Medicine, graduate programs leading to the Master of Science degree with majors in the fields of anatomy, bacteriology, biochemistry, dental materials, operative dentistry and dental materials, oral pathology, orthodontics, pedodontics, pharmacology, and physiology, and a two-year program for the training of dental hygienists.

The professional curriculum is organized to provide the basic scientific knowledge, the mechanical skills, and the clinical experience essential for competence and success in dentistry. The curriculum requires four years of didactic and clinical training, following two or more academic years of preprofessional work in liberal arts in an accredited college or university. The University offers, on the Eugene campus, a three-year pre dental curriculum which satisfies the admission requirements of the Dental School (see page 162).

Students completing the two-year dental-hygiene program may, by taking two additional years of work on the Eugene campus, satisfy the requirements for the Bachelor of Science degree with a major in health education. Beginning with the fall 1969 class, one year of college-level education will become a preadmission requirement to the dental-hygiene program. (See SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION.)

Detailed information concerning the Dental School is published in a separate catalog; copies will be furnished on request.

School of Education

PAUL B. JACOBSON, Ph.D., Dean of the School of Education.

CLARENCE HINES, D.Ed., Associate Dean of the School of Education.

Professors: MAX ABBOTT, HAROLD ABEL, C. E. AVERY, F. L. BRISSEY, R. O. CARLSON, W. W. CHARTERS, EUGENE DILS, KENNETH A. ERICKSON, GRACE GRAMHAM,* N. R. HAWK, A. C. HEARN,* CLARENCE HINES, C. L. HUFFAKER (emeritus), P. B. JACOBSON, P. E. KAMBYL, JOHN LOUGHARY, R. N. LOWE, ARTHUR MITTMAN, R. E. NYE, GERALD PATTERSON, ARTHUR PEARL, A. A. SANDIN, RICHARD A. SCHMUCK, GUY SHELLENBARGER, V. S. SPRAGUE, F. L. STETSON (emeritus), D. E. TOPE, W. L. VAN LOAN, H. B. WOOD.†

Associate Professors: KEITH ACHESON, M. H. ACKER, BARBARA BATEMAN, CHESTER BOWERS, DOROTHY N. CANDLAND,‡ DONALD L. CARR, J. E. DEJUNG, HENRY F. DIZNEY, TERRY EIDELL, FREDERICK COSTON, L. D. FISH,‡ ROBERT FUCHIGAMI, JOHN HANSEN, R. JEAN HILLS, GERALD KRANZLER, JOHN LALLAS, WAYNE LANCE, L. L. LOVELL,§ ESTHER MATTHEWS, R. C. MATTSO, FRANCIS NICKERSON, VERNICE T. NYE, HENRY OSIBOV, HERBERT PREHM, JESSIE PUCKETT, RICHARD RANKIN, MILDRED ROBECK, O. F. SCHAAF, CLARENCE SCHMINKE, FRANCES G. SCOTT, JOHN E. SUTTLE, ANDREW THOMPSON, JORDAN UTSEY, CARL WALLEN, RONALD WALLER, RUTH WILLARD, MILDRED WILLIAMS, HARRY WOLCOTT.

Assistant Professors: F. A. BENSON, G. K. BOGEN, ROBERT BOWLIN, HAZEL BRESLIN, BARTON CLEMENTS, JAMES CROSSON, GORDON DUDLEY, V. KNUTE ESPESETH, JANE GEHRING, SUSAN GILMORE, ERIC HOUGHTON, JAMES HOTCHKISS, JAMES JOHNSTON, NORBERT MAERTENS, GREGORY MALTBY, M. C. MARTINSON, LEW B. MYERS, EVELYN PIPER, PATRICIA POND, GAYLORD RYBOLT, GEORGE SHEPERD, WAYNE SPRAGUE, D. P. TEN BRINKE, SAUL TOOBER, HILL WALKER.

Senior Instructors: JAMES BOOTH, HAZEL HOLBOKE, SUSAN MILLER, EVA O'NEIL, RUTH WAUGH.

Instructors: BORIS BOGATZ, JACQUELINE BROCKWAY, GARY BURTON, RALPH CARLSON, WILLIAM DEDMAN, JOE DOLAN, LARRY ENGELSON, FRANK GILLES, WENDELL HALL, GLEN HANKINS, KARL HARDIN, JACK HOLLISTER, MARVIN JANZEN, EDNA KEHL, J. A. KEITH, DONOVAN KIMBALL, GLENN MADSEN, ROBERT MOURSUND, GEORGE NELSON, MARGARET NIELSEN, ANDREA PICKMAN, HOWARD RICHARDSON, THOMAS STIPEK, NONDA STONE, PAUL TUCKER.

Assistants: JEANNE ARMSTRONG, HOWARD ASCHWALD, RONALD BIGELO, MARILYN BLOCH, JOAN BUELL, LOREN BUNYAN, SUSAN BUSCH, FRANKLIN CAMPBELL, GERTRUDE CAREY, CAREN CHAPPELL, SANDRA CHERNOFF, DAPHNE CLARK, JACK COFFLAND, RICHARD COWGER, AHLEEN CRAWFORD, DONALD EBERT, ARTHUR ELLIS, CASPER FERNETI, RONALD FIELD, LAWRENCE FREEMAN, DEAN FUNK, VINCENT GALLO, MERLYN GUBSER, ERROL HAMMOND, ALICE HARRIS, JANETTE HOFMEISTER, NORMAN HOOVER, ROBERT HUFF, RAY HULL, DONALD HUNSAKER, DAVID JACOBSON, JAMES JENNINGS, S. DIANE JOHNSTON, JOHN JONES, WILLIAM LACEY, JACK LAVENBURG, MARJORIE LEE, JOSEPH MALIK, STEPHEN MARKS, FRED MATTEUCCI, DONALD McLARRIN, HELEN MILLMAN, SHITALA MISHRA, LLOYD MORIN, LOVELLA NOLL, ARTHUR PERLIN, MARY ROGERS, RONALD SARIS, ED SHIMAN, KENNETH SLADE, RONALD SMITH, JAY SOWLE, CLAY STARLIN, CHARLES TATE, TERRANCE THOMAS, BEVERLY TIMMONS, MURRAY TONDOW, EDWARD C. TYLER, CHRISTINE WALKEN, CLARENCE WALTHER, DENNIS WARNER, MARY WEBER, JOANN WHITLOCK, LEE WICKLUND, RODNEY WICKSTROM, KENNETH WIEG, PHILIP WILSON, OWEN WHITE.

* On sabbatical leave, spring term, 1967-68.

† On leave of absence fall and spring terms, 1967-68.

‡ On leave of absence, 1967-68.

§ On sabbatical leave, 1967-68.

THE SCHOOL OF EDUCATION offers undergraduate and graduate work in teacher education at the elementary and secondary levels. Instruction is also offered, principally at the graduate level, in the fields of school administration, school psychological services, and higher education.

The University of Oregon is accredited by the National Council for Accreditation of Teacher Education for the preparation of elementary and secondary teachers, school administrators, and specialists in school personnel services. The council has also approved the graduate programs in these fields leading to the master's and doctor's degree.

Admission to Teacher Education. Students may enroll in methods courses in the School of Education only after they have been admitted to the teacher education program. Admission requirements include (1) at least sophomore standing, (2) a cumulative GPA of at least 2.25, (3) speech clearance, (4) writing clearance, and (5) recommendation by the Office of Student Affairs. Further information and admission application forms may be obtained in the Teacher Education Office in the School of Education.

Undergraduate Program. In planning its teacher education program, the University recognizes three qualifications for a good teacher: (1) a broad and liberal education; (2) a mastery of subject matter; (3) a knowledge of child and adolescent psychology and an understanding of professional problems and techniques.

Students preparing for secondary-school teaching are usually required to complete their work for a bachelor's degree with a major in a subject field—taking as electives the professional courses in education required for teacher certification. An undergraduate major program in education is, however, available principally for students preparing for elementary- or junior-high-school teaching. The program leads to the Bachelor of Arts, Bachelor of Science, or Bachelor of Education degree.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Program. Professional work in education beyond the undergraduate courses required for certification is offered principally at the graduate level. Specialized graduate work is offered in school administration, curriculum and supervision, school psychological services, curriculum and instruction, elementary education, secondary education, higher education, educational foundations, and music education. Graduate work in education leads to the following degrees: Master of Arts, Master of Science, Master of Education, Doctor of Philosophy, Doctor of Education.

Special programs of graduate study are also offered toward the satisfaction of the Oregon state requirement of a fifth year of college work for the standard secondary-school certificate. The student may qualify, on the completion of the fifth year, for an interdisciplinary M.A. or M.S. in a program planned especially for teachers or for a departmental degree with a major in a subject field or in education.

Bureau of Educational Research. The Bureau of Educational Research conducts basic research in the field of education and provides consultant and field services to the schools of the state for the solution of problems related to the administration, organization, and operation of educational programs.

Affiliated with the Bureau is the Oregon School Study Council, a research and service agency sponsored by the Oregon State Department of Education, the Oregon School Boards Association, and the University of Oregon. Its program is supported by dues paid by participating school districts.

Curriculum Library. The Curriculum Library, located in the University Library, provides facilities for specialized study of the public school curriculum

and for practical research on curriculum problems. The materials of the library include: (1) recent and important courses of study, units, and other curriculum materials available in the United States; (2) a comprehensive collection of elementary- and secondary-school textbooks; (3) an extensive file of standardized texts and other instruments of pupil evaluation; (4) a large collection of free and inexpensive pamphlets, maps, exhibits, and other material suitable for use in the classroom; (5) bibliographies on various phases of the public school curriculum.

Placement Service. The University maintains a central Placement Service which provides assistance to graduating students and alumni who are seeking new or better teaching and administrative positions at the elementary, secondary, and college levels. See page 103.

Teacher Education

Foundations of Education

Broad fundamental courses offered by the School of Education for students preparing for teaching and administration at all levels of education are listed below.

UPPER-DIVISION COURSES

Ed 310. The School in American Life. 3 hours.

The school as a social institution; the impact of dominant characteristics of American society on the school; historical developments of elementary and secondary education; patterns of curriculum development; school organization; school law; current issues in education. Wolcott.

Ed 315. Human Development and Learning. 5 hours.

The understanding of children's behavior at various developmental levels during the school years; learning theories and principles, and application to classroom situations; individual differences as they effect developmental and learning patterns; methods of evaluating changes in children's behavior. Johnston, Rankin.

Ed 317, 318. Social Foundations of Teaching. 3 hours each term.

First term: the nature and influence of such social determinants of child behavior as family, class structure, peer groups, mass media of communication, etc.; the social status of childhood, emerging rights, agencies concerned with children. Second term: the social role of the school, including a study of community-analysis techniques as an approach to the school environment; community resources for teaching, and ways of utilizing these resources; educational implication of children's out-of-school activities and problems; community beliefs and practices, and their relation to the curriculum. Graham.

Ed 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. Seminar. (G) Hours to be arranged.

Ed 435. Audiovisual Aids. (G) 4 hours.

The development and use of audiovisual aids in education. Emphasis on actual learning situations in which radio, recordings, films, slides, pictures, maps, charts, etc. are utilized. Sources of materials and equipment; administration of audiovisual programs. Acheson.

Ed 440. History of Education. (G) 3 hours.

A general review of the growth and development of education in relation to the civilization of the times; emphasis on development of educational philosophies. Bowers

Ed 441. History of American Education. (G) 3 hours.

The intellectual development of the United States, with special reference to the development of the school system. Prerequisite: knowledge of American history. Bowers.

Ed 445. Modern Philosophies of Education. (G) 3 hours.

An examination of educational philosophies proposed by recent leaders and critics of American educational theory and practice. Bowers.

Ed 476. School Law and Organization. (G) 2 hours any term.

Oregon laws applying to schools and teachers; teacher personnel policies and practices; professional organizations; means for continued professional growth.

Ed 491. Social Education. (G) 3 hours.

Structure and functioning of society, as a background for the study and evaluation of education in its varied forms; the contribution of sociological principles and findings to the improvement of educational practices. Graham.

GRADUATE COURSES***Ed 501. Research.** Hours to be arranged.***Ed 503. Thesis.** Hours to be arranged.**Ed 505. Reading and Conference.** Hours to be arranged.**Ed 507. Seminar.** Hours to be arranged.***Ed 508. Workshop.** Hours to be arranged.

Opportunity for group work on special problems.

Ed 542. Urbanization, the Pupil, and the School. 3 hours.

Prevailing social patterns in urban society that are pertinent to an understanding of what pupils learn and study, pupil behavior in general, and school problems; impact of urbanization on the changing American family, teenage culture, population migrations, and the school. Emphasis on effects on children. Graham.

Ed 545. School and Society in the Recent Past. 3 hours.

The liberal evolution in modern education; the state and education; freedom in teaching; education and social ends; the place of religion in secular education. Bowers.

Ed 598. Comparative Education. 3 hours.

Educational systems, philosophies, curricula, and recent developments in European, Asian, African, Pan-American, and other countries of the world; origins; factors underlying common and unique characteristics of various educational systems. Wood.

COURSES OFFERED ONLY IN SUMMER SESSIONS AND EXTENSION**Ed 475. Parent-Teacher Organizations.** 2 hours (extension and summer sessions).**Ed 478. Improvement of Instruction in Reading.** (G) 3 hours (extension).**Elementary Education**

In the field of elementary education the University offers (1) a four-year program leading to a bachelor's degree and (2) a full program of graduate work leading to advanced degrees.

Undergraduate Program. The undergraduate program in elementary education is planned to meet the requirements of the Oregon State Board of Education for a basic certificate. The program includes: (1) a broad distribution of studies in subject fields, (2) three integrated blocks of professional courses, and (3) an

* No-grade course.

additional group of professional courses. The three blocks must be taken in sequence, and the instruction included in each block must be taken concurrently.

General Education Courses*		Term Hours
Arts and Letters:		
English Composition (Wr 121, 122, 123)		9
Fundamentals of Speech (Sp 121)		3
Literature (Eng 101, 102, 103, Eng 104, 105, 106, or Eng 107, 108, 109)....		9
Art in the Elementary School (Art 311, 312)		4
Music Fundamentals (Mus 321, 322)		4
Electives (language, literature, literary criticism, speech)		6
Social Science:		
History of the United States (one term)		3
Introduction to Geography (one term)		3
Sequence in social science—completion of history or geography sequence or any year sequence which satisfies the social science group requirement		6-9
Social science electives (total of 27 term hours in social science required)		12-15
Science:		
General Biology		4
Physical Science		4
Sequence in science—completion of biology or physical science sequence or any year sequence, except psychology, which satisfies the science group requirement		8-12
† Mathematics for Elementary Teachers (Mth 121, 122)		6
Science electives (total of 26 term hours in science required)		0-4
Health and Physical Education:		
Physical Education (PE 180)		2
Games for the Elementary School (PE 221), Rhythms for the Elementary School (PE 222), Fund. Body Movement, Posture, Tumbling (PE 223)		3
Elementary-School Health Education (HE 450)		3
Professional Courses		
Block I:		
Human Development & Learning (Ed 315)		5
Intro. to Basic Classroom Procedures (Ed 331)		2
Block II:		
Teaching Language Arts in the Elementary School (Ed 332)		3
Teaching Reading in the Elementary School (Ed 335)		3
Student Teaching (Ed 415)		4
Block III:		
Teaching Social Studies in the Element. School (Ed 334)		3
Teaching Science in the Elementary School (Ed 336)		3
Student Teaching (Ed 415)		11
Additional Professional Courses:		
Social Foundations of Teaching (Ed 317)		3
Teaching Mathematics in the Elementary School (Ed 333)		3
Art in the Elementary School (ArE 313)		3
Music Methods for Elementary Teachers (MuE 383)		3
Methods in Elementary-School Phys. Ed. (PE 420)		3
Children's Literature (Lib 451)		3

The University also has an elementary teacher education program that includes a period of internship. For information concerning this program, consult the Teacher Education Office, School of Education.

Graduate Program. The graduate program in the field of elementary education is designed to provide continued study opportunities for professional personnel in the field and, with the cooperation of other divisions of the University, to prepare master elementary-school teachers, elementary-school principals, supervisors, and directors, college teachers in the field of elementary education, and other specialists with responsibilities for the education of children. A brochure describing the graduate program in elementary education will be furnished on request to the School of Education.

* Honors College courses may be taken in place of the courses in literature, social science, and science listed below as requirements.

† Students who have had equivalent work in mathematics are exempt from this requirement.

UPPER-DIVISION COURSES

Ed 330. Field Experience. 1-2 hours.

Direct experience with children of all ages, with selection of setting determined by student needs; work with hospitalized, mentally retarded, or delinquent children; September experience in a regular classroom during the first two weeks of the school year; leadership in recreational activities.

Ed 331. Introduction to Basic Classroom Procedures. 2 hours.

The elementary teacher's role in the organization of time, space, and materials. To accompany directed observation and participation in elementary-school classroom activities, one-half day a week. Keith.

Ed 332. Teaching Language Arts in the Elementary School. 3 hours.

Language development from kindergarten through elementary school; emphasis on language as a means of thinking and communication. Curriculum, methods, materials, and evaluation in the teaching of speaking, listening, handwriting, spelling, correct language usage, etc. Miller.

Ed 333. Teaching Mathematics in the Elementary School. 3 hours.

Arithmetic in the elementary-school program. Types of instruction, criteria for selection, placement, and organization of content. Prerequisite: Ed 315. Schminke, Maertens.

Ed 334. Teaching Social Studies in the Elementary School. 3 hours.

Objectives, scope, and sequence of elementary school social studies. Emphasis on methods of unit teaching; development of skills in critical thinking and problem solving; relationship of other content areas to social studies; resources and instructional materials.

Ed 335. Teaching Reading in the Elementary School. 3 hours.

The nature of the reading process; development of reading readiness, word recognition, study skills, vocabulary, comprehension, and reading interest. Methods of diagnosing difficulties; evaluation of programs; selection of materials. Utsey, Holboke.

Ed 336. Teaching Science in the Elementary School. 3 hours.

Emphasis on teaching the processes of science; ways of using district, state, and nationally developed programs in planning instruction for children; using instructional media, methods of presentation, appraising the attainment of objectives.

Ed 404. Seminar: Elementary Student Teaching.** 2 hours.**Ed 405. Reading and Conference.** Hours to be arranged.Ed 414. Student Teaching: Kindergarten.** 3-15 hours (15 hours maximum credit).***Ed 415. Student Teaching: Grades 1-6.** 3-15 hours (15 hours maximum credit).

UPPER-DIVISION COURSE CARRYING GRADUATE CREDIT

Ed 407. Seminar. (G) Hours to be arranged.**Ed 409. Practicum.** Hours to be arranged.**Ed 451. Early Childhood Education.** (G) 3 hours.

Relationship of the development of young children to the educational programs provided for them. Program planning; group behavior; individual behavior; the place of the teacher; equipment; activities; books and music for young children.

GRADUATE COURSES

Ed 501. Research.** Hours to be arranged.Ed 503. Thesis.** Hours to be arranged.

* No-grade course.

Ed 505. Reading and Conference. Hours to be arranged.

Independent study for graduate students interested in special problems or topics in elementary education.

Ed 507. Seminar. Hours to be arranged.

Reading.

Evaluation of Elementary School Programs.

Elementary School Mathematics.

Elementary School Social Studies.

Primary Education.

Analysis of Teaching.

Language Arts.

***Ed 508. Workshop.** Hours to be arranged.

Opportunity for group work on special problems.

Ed 509. Practicum. Hours to be arranged.

Ed 534. Science in the Elementary School. 3 hours.

The place of science in the elementary school, with particular reference to the value of science in the lives of children. Selecting and organizing content; coordinating science with elementary-school activities; methods and materials; rooms and equipment. Hull, Kambly.

Ed 535. Social Studies in the Elementary School. 3 hours.

Social-education objectives; children's social problems; unit development; work-study skills; organization of the program; materials; research findings basic to the social education of children. Willard.

Ed 536. Language Arts in the Elementary School. 3 hours.

The role of language arts in the elementary-school program; objectives; research findings on language development; the teaching of spelling, writing, and speaking-listening skills; newer instructional materials; testing and evaluation. Willard.

Ed 537. Reading in the Elementary School. 3 hours.

Nature of the reading process, objectives, organization of a desirable reading program; reading readiness, reading skills; procedures and materials for developing children's reading abilities; methods of diagnosing difficulties and evaluating progress; research findings concerning the teaching of children to read. Utsey.

Ed 538. Mathematics in the Elementary School. 3 hours.

Number abilities needed by children; research findings in mathematics education; designing number experiences; theories of teaching, desirable teaching procedures, selection and use of materials. Schminke, Maertens.

Ed 597. Administrative and Curricular Practices in Elementary Schools. 3 hours.

Study, observation, and evaluation of current developments in elementary education; special attention to such innovations as nongrading, multigrading, flexible grouping, computerized curriculum planning, instructional materials centers, special programs for the culturally deprived and for gifted children, and middle schools. Prerequisite: consent of instructor.

Secondary Education

Under Oregon school law, five years of collegiate preparation, including specified work in education and in subject fields, is required for a standard teacher's certificate. However, graduates of accredited colleges and universities who have completed a four-year teacher-education program may, on graduation, be granted a basic certificate, which is valid for three years. For renewal of the basic certificate after three years, 24 term hours of work toward the completion of the fifth-year program are required.

* No-grade course.

Junior High-School Teaching. The following education courses are recommended as part of the preparation of junior high-school teachers:

	Junior Year	Term Hours
Human Development & Learning (Ed 315)		5
Reading in High School & College (Ed 469)		3
Senior Year		
The Junior High School (Ed 484)		3
Special Methods (Ed 408)		3
Student Teaching: Junior High School (Ed 416)		10
Electives in education		6
Graduate Year		
Junior High School Curriculum (Ed 571)		3
Principles & Practices of Guidance Services (Ed 485)		3
Diagnostic Techniques in the Basic Skills (Ed 465)		3
Electives in education		6

A special program, leading to the bachelor's degree, for prospective junior high-school language arts-social studies teachers is offered through the School of Education. The requirements are as follows:

	Term Hours
Language arts:	
English Composition for Teachers (Wr 411)	3
Modern English Grammar (Eng 492)	3
American literature	9
English literature	9
Literary Analysis for Teachers (Eng 488)	3
History of the English Language (Eng 491)	3
English electives	6
Speech elective	3
Social studies:	
Introductory geography	9
Geography of North America (Geog 302, 303)	6
Atlantic and Mediterranean Europe (Geog 471)	3
Central and Eastern Europe (Geog 472)	3
Soviet Union (Geog 473)	3
Geography electives	12
American history	9
European or world history	9
History electives	12
Electives in other social-science fields	6
Professional education	38
Including courses recommended above for junior high-school teachers and, in addition: Seminar: September Experience (Ed 407); Principles of Remedial Education (Ed 429); History of American Education (Ed 441).	

Senior High-School Teaching. The following education courses are recommended as part of the preparation of secondary teachers:

	Junior Year	Term Hours
Human Development & Learning (Ed 315)		5
Senior Year		
*Special Secondary Methods (Ed 408)		3
*Student Teaching: Junior High (Ed 416) or Senior High (Ed 417)		10
Elective chosen from list under Graduate Year		3
Graduate Year		
Reading in High School & College (Ed 469)		3
Philosophy or history of education		3
Courses in two of more of the following fields of education: curriculum, evaluation of learning, guidance & counseling, teaching of reading, social foundations of education, education of the exceptional child, educational teaching media		12

* This work may be taken in the graduate year, but may not be applied toward a graduate degree; Ed 416 or Ed 417 is required for the basic certificate.

A student who has completed the courses listed under "junior year" and "senior year," has attained adequate preparation in a subject field, has earned a bachelor's degree, and has been recommended to the Oregon State Department of Education by the University, is eligible for a basic certificate. A student who has taken part of his preparatory work at another institution, especially an out-of-state institution, should consult the School of Education concerning allowed equivalents for the satisfaction of Oregon requirements.

Before assignment to student teaching, a student must obtain the recommendation of his major school or department.

Subject Preparation. Under regulations adopted by the Oregon State Board of Education, new teachers employed in approved high schools may be assigned to teach only in those subject fields in which they have been recommended by the University as having adequate preparation.

One of the student's subject fields must be a field in which the University offers supervised teaching: art, biology, business, chemistry, English, French, general science, German, health education, journalism, Latin, librarianship, mathematics, music, physical education, physics, social studies, Spanish, or speech and drama. For specific requirements in these fields the student should consult the special advisers for prospective teachers in each field. Names of advisers are available upon inquiry at the Certification Office in the School of Education.

The University also has a secondary teacher education program that includes a period of internship. For details of this program, consult the School of Education.

Graduate Work. Most students, while meeting the fifth-year requirements for standard secondary teacher certification, find it possible to satisfy, at the same time, the requirements for an interdisciplinary master's degree or for a departmental master's degree in a subject field or in education.

UPPER-DIVISION COURSES

Ed 314. Principles of Secondary Teaching. 3 hours.

Study of the actual classroom teaching process, including classroom organization and management, planning teaching units, evaluating pupil learning, and similar problems. Prerequisite: Ed 315. Kambly.

Ed 405. Reading and Conference. Hours to be arranged.

Ed 408. Special Secondary Methods. 1 to 3 hours.

Prerequisite: Ed 315.

***Ed 416. Student Teaching: Junior High School.** 3-15 hours.

15 hours maximum credit for Ed 416 or Ed 417 or any combination of these courses.

***Ed 417. Student Teaching: Senior High School.** 3-15 hours.

15 hours maximum credit for Ed 416 or Ed 417 or any combination of these courses.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. Seminar. (G) Hours to be arranged.

Ed 420. The Student Council in the Secondary School. (G) 3 hours.

Aims and objectives of the student council movement; types of organization; leadership development; council relationship problems; evaluation of the student council program.

Ed 427. School Activities. (G) 3 hours.

Principles and purposes of school activities; pupil participation in school government; assemblies; clubs, social activities; athletics, speech activities,

* No-grade course.

drama, music, publications; evaluation of the school activity program. Shellenbarger.

Ed 484. The Junior High School. (G) 3 hours.

Origin and functions of the junior high school; characteristics and needs of the early adolescent; administration of the junior high school; curriculum and instruction; guidance; school activities; evaluation. Hansen.

GRADUATE COURSES

***Ed 501. Research.** Hours to be arranged.

***Ed 503. Thesis.** Hours to be arranged.

Ed 505. Reading and Conference. Hours to be arranged.

Ed 507. Seminar. Hours to be arranged.

***Ed 508. Workshop.** Hours to be arranged.

Opportunity for group work on special problems.

Ed 585. Instructional Practices in Secondary Schools. 3 hours.

Study, observation, and evaluation of innovative practices in junior and senior high schools; special attention to provisions for gifted and slow learners, flexible scheduling, large and small group instruction, independent study, the house plan, and instructional materials centers.

Ed 593. Methods in Secondary-School Language Arts. 3 hours.

Review of research in the problems of teaching language arts in the secondary schools; observation and participation in demonstration teaching of literature, grammar, and composition. Designed for administrators and supervisors, as well as classroom teachers. Prerequisite: teaching experience or consent of instructor.

Ed 594. Methods in Secondary-School Mathematics. 3 hours.

Development of proficiency in the use of the problem-solving approach to the teaching of topics in arithmetic, algebra, geometry, and advanced high-school mathematics. Consideration of the strengths, inadequacies, and needed revisions of the present-day mathematics curriculum. Prerequisite: teaching experience or consent of instructor. Schaaf.

Ed 595. Methods in Secondary-School Science. 3 hours.

Selection of materials for secondary-school science teaching, demonstrations, science test construction, instructional devices; use and care of microscopes, meters, and other equipment. Prerequisite: teaching experience or consent of instructor. Ten Brinke.

Ed 596. Methods in Secondary-School Social Studies. 3 hours.

Trends in the social-studies curriculum; the unit method of teaching; the core curriculum; social-studies materials and teaching techniques; teaching reflective thinking; teaching current affairs. Students may work on problems of individual interest, and prepare materials for use in junior and senior high-school classes. Prerequisite: teaching experience or consent of instructor. Williams.

Psycho-Educational Studies

THE DIVISION OF PSYCHO-EDUCATIONAL STUDIES embraces the broad fields of educational and psychological services as they relate to both school and certain nonschool settings. The division offers programs leading to master's and doctor's degrees in the following fields: counseling, educational psychology, remedial education, and special education. The division also offers service instruction in these fields as a part of the general teacher education program. Practicum

*No-grade course.

experiences are provided through the DeBusk Memorial Center, public and private schools, and a variety of other community agencies.

The program, in all of its phases, is interdisciplinary in character, involving cooperation of the faculties of the School of Education and of several departments of the College of Liberal Arts. The courses listed below are those for which the School of Education has the principal responsibility; students working in the several fields also take selected courses offered in the college.

A doctoral program in counseling psychology and two-year programs in rehabilitation counseling and in school psychology, leading to the master's degree, are offered by the School of Education. Graduate programs in speech pathology and audiology are offered through the School of Education in collaboration with the Department of Speech and the University of Oregon Medical School.

Programs of students in the Division of Psycho-educational Studies are planned according to the student's academic background, experience, and professional objectives. Courses offered satisfy needs of students completing degree or certification requirements in elementary education, secondary education, and school administration.

In all fields, supervised practical experience is provided in schools, hospitals, mental health agencies, juvenile departments, rehabilitation centers, and other agencies concerned with learning and adjustment problems of children and adults.

Practicum instruction is organized on two levels. Students who are receiving their first experience in a field and require relatively close supervision are enrolled in Ed 409; advanced students who are able to work more independently are enrolled in Ed 509.

The programs in rehabilitation counseling and in juvenile correction are administered through the Center for Social Service Training and Research. Both programs lead to the master's degree, and normally require two years for completion.

Admission to specialization programs requires a formal application procedure. For information on admission to specific programs contact: Personnel Director, Graduate Personnel Office, School of Education.

Counseling

UPPER-DIVISION COURSE

Ed 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. **Seminar.** (G) Hours to be arranged.

Introduction to Rehabilitation. Waller.
Research in Counseling. Loughary.
Elementary Counseling. Kranzler.
Counseling Issues. Dudley, staff.
Group Counseling. Clements, Toobert, Waller.
Occupational Information. Matthews.

Ed 409. **Practicum.** Hours to be arranged.

Secondary-School Counseling. Acker, Clements, Matthews, Waller.
Elementary-School Counseling. Kranzler.
Family Counseling. Lowe.
Group Counseling. Clements, Toobert, Waller.
Rehabilitation Counseling. Rybolt.
Introduction to Counseling. Clements, staff.
College Counseling. Gilmore, Toobert.

Ed 485. **Principles and Practices of Guidance Services.** (G) 3 hours.

The need for guidance services in the schools; tests, inventories, question-

naires, and records; the role of the home and the community in guidance; counseling the individual student. Clements.

Ed 488. Educational and Vocational Guidance. (G) 3 hours.

Designed primarily for advanced students preparing for positions as counselors. A study of current materials and trends in educational and vocational opportunities. Prerequisite: Ed 424, Ed 485. Matthews.

Ed 492. Functional Aspects of Physical Disability. (G) 3 hours.

Designed to familiarize the student with the impact of physical disability and chronic illness on vocational capacity; review of basic anatomy and physiology of several major medical conditions which frequently result in impairment of physical function. Waller.

GRADUATE COURSES

***Ed 501. Research.** Hours to be arranged.

Problems in Rehabilitation Counseling.
Problems in School Counseling.
Counseling Function.

***Ed 503. Thesis.** Hours to be arranged.

Ed 505. Reading and Conference. Hours to be arranged.

Ed 507. Seminar. Hours to be arranged.

Elementary School Guidance. Kranzler.
Counseling Supervision. Acker.
Research in Counseling. Loughary.
Evaluation of Work Potential. Acker, staff.
Ethical and Moral Issues. Gilmore.
Advanced Counseling Theory. Dudley.
Vocational Development Theory. Matthews.
Professional Practice. Acker, Waller.

***Ed 508. Workshop.** Hours to be arranged.

Ed 509. Practicum. Hours to be arranged.

Secondary-School Counseling. Acker, Clements, Matthews.
Elementary-School Counseling. Kranzler.
Family Counseling. Lowe.
Group Counseling. Clements, Toobert, Waller.
Rehabilitation Counseling. Rybolt, Waller.
Field Instruction. Rybolt, Waller.
Counseling Supervision. Acker.
College Counseling. Gilmore, Toobert, Waller.

Ed 526. Counseling Theories. 3 hours.

Designed primarily for students preparing for positions in counseling in both school and nonschool settings; major emphasis placed upon counseling points of view; consideration given to purposes, techniques, and processes of counseling. Prerequisites: Ed 424, Ed 485, and Psy 527. Gilmore.

Ed 528. Group Testing in Schools and Colleges. 3 hours.

An intensive study of the purposes, uses, administration, scoring, and interpretation of group tests commonly used in public schools and colleges. Testing in the areas of achievement, aptitudes, interests, and personality. Designed primarily for advanced students in educational psychology, human development, psychometrics, and counseling. Prerequisite: Ed 424. Rybolt.

Ed 570. Advanced Functional Aspects of Physical Disability. 3 hours.

Review of the historical and contemporary structures of medical practice, and of the influence of these structures on patient-physician and physician-counselor relationships; principles of consultation, with special reference to medical consultation in counseling; application of the principles of vocational evaluation, with specific emphasis on the most effective incorporation of medical data.

* No-grade course.

- Ed 589. **Organization and Administration of Guidance Services.** 3 hours.
Principles and functions of guidance; organizing the guidance program;
guidance personnel; evaluation of the school's guidance services.

Educational Psychology

UPPER-DIVISION COURSE

- Ed 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

- Ed 407. **Seminar.** (G) Hours to be arranged.
Developmental Psychology—Child. Abel.
Developmental Psychology—Adolescent. Abel.
Developmental Psychology—Adult. Scott.
Introduction to Design and Analysis of Experiments.
Projective Techniques. Toobert.
- Ed 409. **Practicum.** (G) Hours to be arranged.
Individual Interests Test.
- Ed 424. **Measurement in Education.** (G) 3 hours.
Use and interpretation of informal and standardized tests as supervisory and
guidance instruments for the diagnosis, analysis, evaluation, and improvement
of instruction in the elementary and secondary schools. Test planning, item
writing, essay testing, administration and scoring, analysis of scores and grade
assignment. The course includes simple statistics of test interpretation. Dizney.

GRADUATE COURSES

- *Ed 501. **Research.** Hours to be arranged.
School Psychology. Lovell.
Problems in Learning. Lovell, Mittman.
- *Ed 503. **Thesis.** Hours to be arranged.
- Ed 505. **Reading and Conference.** Hours to be arranged.
- Ed 507. **Seminar.** Hours to be arranged.
Abnormal Psychology.
Learning.
Theories of Personality.
Design and Analysis of Experiments.
Correlation Methods.
Perception Motivation Somatopsychology.
Thesis.
- *Ed 508. **Workshop.** Hours to be arranged.
- Ed 509. **Practicum.** Hours to be arranged.
- Ed 512. **Introduction to Research Procedures in Education.** 3 hours.
The nature and procedures of research in education. Open to graduate students
majoring in other fields. Does not take the place of individual supervision of
the student's thesis. An introductory course in statistics is a prerequisite.
Mittman.
- Ed 515, 516. **Educational Statistics.** 3 hours each term.
Technique in quantitative and experimental methods. Calculus not required.
Admission after fall term only with consent of instructor. Mittman.
- Ed 517. **Advanced Educational Statistics.** 3 hours.
- Ed 525. **Theory and Technique of Educational Measurement.** 3 hours.
The theoretical bases and principles of educational measurement test theory;
item selection techniques; nature of measurement; units and norms; reliability

and validity; batteries and profiles. Designed primarily for advanced students in educational psychology and human development. Prerequisite: Ed 424, Ed 515, Ed 516, or equivalent. Lovell, Mittman.

Ed 549. Principles and Practices in School Psychology. 3 hours.

The theory and function of a school psychology in its relation to the learning function. Required of all school psychology majors. Carr.

Ed 529, 530, 531. Advanced Educational Psychology. 2 hours each term.

Review of some modern viewpoints in educational psychology, with particular attention to theories of learning and their application to problems of school learning. Must be completed in sequence; students who have had a course in the psychology of learning may be permitted to enter in the winter term. Prerequisites: courses in educational or general psychology; statistics. Dizney.

Ed 564. Mental Tests. 4 hours.

Selection, administration, and interpretation of individual tests utilized in testing exceptional and extremely deviate children. Prerequisite: Ed 424, Psy 524 or Psy 525. Rankin.

Remedial Education

UPPER-DIVISION COURSE

Ed 405. Reading and Conference. Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. Seminar. (G) Hours to be arranged.

Social-Emotional Problems. Hotchkiss.
Careers in a Changing World. Pearl.
Alienation of Youth from Education. Pearl.
Life Styles of the Poor. Pearl.

Ed 409. Practicum. (G) Hours to be arranged.

Diagnostic-Remedial Clinic. O'Neil.
Diagnostic-Remedial Clinic. Bateman.
Social-Emotional Problems. Hotchkiss.
Disadvantaged Youth. Pearl.

Ed 428. Psychology of Reading Instruction. (G) 3 hours.

Nature of the reading process; factors of learning and development related to reading achievement; psychological foundations of methods and materials of reading instruction; nature and treatment of reading disability. Bateman.

Ed 429. Principles of Remedial Education. (G) 3 hours.

Survey of remedial education; factors associated with underachievement; general principles of diagnosis and remediation; diagnostic instruments and remedial resources. A first course in remedial education, with application to both elementary and secondary education. Bateman.

Ed 465. Diagnostic Techniques in the Basic Skills. (G) 3 hours.

Analysis of difficulty in the skills of reading, and related skills; selection, administration, and interpretation of group and individual diagnostic achievement tests; diagnostic procedures; development of the diagnostic report. Concurrent enrollment in Practicum: Remedial Clinic—Diagnosis (Ed 409) required. O'Neil.

Ed 468. Remedial Techniques in the Basic Skills. (G) 3 hours.

Organization and implementation of the remedial program; specific procedures in the diagnosis and remediation of difficulty in the skills of reading, and related subjects. Concurrent enrollment in Practicum: Remedial Clinic—Remediation (Ed 409) required. O'Neil.

Ed 469. Reading in High School and College. (G) 3 hours.

Nature and scope of the developmental and corrective reading program in all

the content areas (e.g., English, social studies, science, and mathematics) with an emphasis on methods, materials, and organization. Frederick.

GRADUATE COURSES

*Ed 501. **Research.** Hours to be arranged.

*Ed 503. **Thesis.** Hours to be arranged.

Ed 505. **Reading and Conference.** Hours to be arranged.

Ed 507. **Seminar.** Hours to be arranged.

Advanced Problems in Theory of Learning Disorders.

Advanced Problems in Research in Learning Disorders.

Advanced Problems in Diagnosis-Remediation of Learning Disorders.

Extreme Learning Difficulties.

Advanced Reading in High School. Frederick.

*Ed 508. **Workshop.** Hours to be arranged.

Ed 509. **Practicum.** Hours to be arranged.

Diagnosis and Treatment of Extreme Learning Problems. O'Neil.

Disadvantaged Youth. Pearl.

Social and Behavior Disorders. Bateman, Hotchkiss.

Special Education

UPPER-DIVISION COURSE

Ed 405. **Reading and Conference.** Hours to be arranged.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. **Seminar.** (G) Hours to be arranged.

Teaching—Mental Retardation. Espeseth, Madsen.

Teaching—Gifted. Dizney.

Teaching—Physical Disability. Sheperd.

Education of Exceptional Children. Stone.

Research—Exceptional Children. de Jung.

Physical Disability. Sheperd.

Behavior Modification. Crosson.

Curriculum Trainable Mentally Retarded. Lance.

Ed 409. **Practicum.** (G) Hours to be arranged.

Exceptional Children—Mental Retardation. Madsen, Richardson.

Exceptional Children—Physical Disability. Sheperd.

Administration of Programs for Exceptional Children. Martinson.

Supervision of Special Educational Personnel. Martinson.

Prescriptive Teaching. Haughton.

Ed 439. **The Gifted Child.** (G) 3 hours.

The psychology, education, and guidance of the mentally superior and the extraordinary gifted child. Dizney.

Ed 462. **Psychology of Exceptional Children.** (G) 3 hours.

Characteristics and problems of all types of exceptional children, with special emphasis on those with sensory handicaps; consideration of essential educational adaptations. Benson.

Ed 463. **The Maladjusted Child.** (G) 3 hours.

The discovery and treatment of the emotionally and socially maladjusted child; the home, school, and community in relation to the child's mental health. Opportunities for the observation of family counseling techniques.

Ed 464. **The Mentally Retarded Child.** (G) 3 hours.

The psychology, education, and guidance of the mentally retarded child. Espeseth.

* No-grade course.

Ed 471. Administration of Special Education. (G) 3 hours.

Organizing, financing, housing, equipping, staffing, and supervising the special-education program; desirable educational provisions for each type of handicapped child; legal provisions for special education. Martinson.

Ed 489. Curriculum for the Mentally Retarded. (G) 3 hours.

Curriculum, methods, and materials for special classes, developed on the basis of the diagnosed characteristics of mentally retarded children. Prerequisite: Ed 464. Espeseth, Sheperd.

GRADUATE COURSES**Ed 505. Reading and Conference.** Hours to be arranged.

Intensive study of problems relating to educating the handicapped. Areas of study are selected in light of the student's interests and professional plans. Mattson.

Ed 507. Seminar. Hours to be arranged.

Teaching—Mental Retardation. Espeseth, Madsen, Sheperd.
Teaching—Physical Disability. Sheperd.
Counseling—Education of Exceptional Children. Rybolt.
Research—Exceptional Children. de Jung.
Neurological Impairment. Myers.
Physical Disability. Sheperd.
Behavior Analysis I and II. Crosson.
Clinical and Rehabilitation Practicum: Cerebral Palsy. Myers.
Neurological Basis of Behavior. Myers.
Psychological Aspects of Mental Retardation. Prehm.
Social-Vocational Aspects of Mentally Retarded. Rybolt.
Piaget: Educational Implications. Benson.
Administration of Pupil Personnel Services. Martinson.
Bio-medical Aspects of Mental Retardation. Prehm.
Psychological Aspects of Mental Retardation. Prehm.
Sociological Aspects of Mental Retardation. Prehm.
Utilization of Community Resources. Richardson.
Advanced Curriculum for Mental Retardation. Sheperd.

***Ed 508. Workshop.** Hours to be arranged.

Role-play Techniques.

Ed 509. Practicum. Hours to be arranged.

Exceptional Children—Problems of Education. Stone.
Exceptional Children—Mental Retardation. Espeseth.
Exceptional Children—Physical Disability. Sheperd.
Administration of Programs for Exceptional Children. Martinson.
Supervision of Special Educational Personnel. Martinson.
Field Research for Administrators. Martinson.
Learning Behavior Research. Crosson.

Ed 563. Diagnosis in Mental Retardation. 3 hours.

Critical evaluation of instruments and techniques used in the identification and diagnosis of mentally retarded children; practice in the solution of problems involving the mentally retarded. Prerequisite: Ed 424, Ed 464, Ed 489; or consent of instructor.

Educational Administration, Curriculum, and Supervision

THE DIVISION OF EDUCATIONAL ADMINISTRATION offers a comprehensive graduate program in educational administration and curriculum and supervision. These programs, which are accredited by the National Council for

* No-grade course.

Accreditation of Teacher Education, include two-year programs which satisfy requirements for administrative certificates issued by the Oregon State Department of Education and the membership requirements of the American Association of School Administrators, and work leading to the Ph.D. and D.Ed. degrees.

Admission. Admission to specialization programs requires a formal application procedure. For information on admission to specific programs, see the Personnel Director, Graduate Personnel Office, School of Education.

Programs. In the area of educational administration there are two basic programs: the administrative career program and the research career program. An extensive program is also provided for those interested in a career in curriculum and supervision.

Administrative Career Program. Designed to prepare students for administrative positions in public schools, junior colleges, or higher education.

Research Career Program. Designed for those interested in careers as research professors in schools of education, and for professional researchers in research and development centers, regional laboratories, and other educational agencies. The program includes a minimum of 45 term hours in an area of research emphasis in educational organization, 30 term hours in research foundations, statistics, and computer technology, and a research internship of at least 15 term hours. Because of its interdisciplinary nature, a major part of the program will consist of courses and seminars offered by the departments of Sociology, Political Science, Anthropology, Economics, and Psychology.

Curriculum and Supervision. Designed for those who are interested in specializing in curriculum and supervision in public school systems and for those interested in university teaching of curriculum or supervision.

Administrative Certificates. By act of the Oregon Legislature, all persons employed in the Oregon public schools in administrative or supervisory positions must hold an Oregon administrative certificate.

Basic Administrative Certificate. To qualify for an Oregon basic administrative certificate, the applicant must: (1) hold a valid Oregon teaching certificate; (2) have completed a five-year general teaching norm at the level to be administered; (3) have had three years of successful teaching experience at the level to be administered; (4) have completed 9 term hours of graduate study in a college or university approved by the State Board of Education for the preparation of school administrators, this preparation to be applicable to a planned sixth-year program for the preparation of administrators.

Standard Administrative Certificate. To qualify for an Oregon standard administrative certificate, the applicant must: (1) hold a valid Oregon standard teacher's certificate; (2) have had five years of successful teaching and administrative experience, including at least two years in some supervisory or administrative capacity; (3) have completed, for a principal's certificate, 33 term hours or, for a superintendent's certificate, 45 term hours of upper-division or graduate study in educational administration subsequent to the master's degree, in a college or university approved by the State Board of Education; (4) be recommended by the college or university in which he has completed his graduate program as having the qualifications for school administration; (5) have completed specialization requirements set by the State Board of Education. At least two-thirds of the work in the University's programs in educational administration must be completed on the Eugene campus.

The two-year programs outlined below meet the Oregon State Department of Education requirements for superintendent's and principal's certificates. Ap-

proximately two-thirds of the candidate's program must be completed after he has received formal notification of admission. Candidates must have an adequate background in the social sciences and humanities. Deficiencies in these areas must be remedied prior to or concurrent with advanced work.

Superintendent's Certificate. The following program satisfies the requirements for the superintendent's certificate:

(1) Nine term hours in the following introductory courses: Public School Administration (Ed 572), Public School Organization (Ed 573), Secondary School Administration (Ed 527), or Elementary School Administration (Ed 554).

(2) Not less than 9 term hours in fields of specialization, selected from the following courses:

School Finance (Ed 575)	Seminar: Problems of Government Finance (Ed 507)
School Buildings (Ed 576)	
Seminar: Advanced School Law (Ed 507)	Seminar: School Business Administration (Ed 507)
Seminar: Change & Organization (Ed 507)	
Seminar: Problems of Staff Organization (Ed 507)	Seminar: School Surveys (Ed 507)

(3) Not less than 12 term hours in the field of curriculum and supervision, including the following: Secondary School Curriculum (Ed 522), Elementary School Curriculum (Ed 553), and School Supervision (Ed 574). The remainder may be selected from the following courses:

Elementary-School Problems (Ed 552)	Seminar: Evaluation of the Elementary-School Program (Ed 507)
Evaluation of Secondary-School Programs (Ed 559)	Seminar: Pupil Personnel Policies & Services in the Elementary School (Ed 507)
Secondary-School Problems (Ed 560)	Seminar: The Community College (Ed 507)
Curriculum Materials (Ed 567)	Seminar: Procedures of Classroom Observation & Analysis of Teaching (Ed 507)
Junior High-School Curriculum (Ed 571)	

(4) Fifteen term hours in advanced graduate seminars. Courses may be selected from the graduate seminars listed under Educational Administration, below.

(5) Six term hours in research methods and field services, selected from the following (3 term hours must be in field services):

Seminar: Advanced Research Design (Ed 507)	Educational Statistics (Ed 515, 516, 517)
Research Procedures in Education (Ed 512)	Research: Field Studies (Ed 501)

(6) Nine term hours in behavioral sciences and humanities. The candidate selects courses in areas where he is deficient.

Principal's Certificate. The following program satisfies the requirements for the principal's certificate.

(1) Nine term hours in the following introductory courses: Public School Administration (Ed 572), Public School Organization (Ed 573), Secondary School Administration (Ed 527) or Elementary School Administration (Ed 554).

(2) Twelve term hours in Curriculum and Supervision, including: Secondary School Curriculum (Ed 522) or Elementary School Curriculum (Ed 553) or Junior High School Curriculum (Ed 571); Evaluation of the Secondary School Program (Ed 559) or Evaluation of the Elementary School Program (Ed 507); Procedures of Classroom Observation and Analysis of Teaching (Ed 507); School Supervision (Ed 574).

(3) Three term hours in research methods and field services, including Research Procedures in Education (Ed 512) or an approved substitute.

(4) Six term hours in the behavioral sciences and humanities.

(5) Three term hours in other administrative courses selected with approval of the student's adviser.

Educational Administration

GRADUATE COURSES

*Ed 501. **Research.** Hours to be arranged.

*Ed 503. **Thesis.** Hours to be arranged.

Ed 505. **Reading and Conference.** Hours to be arranged.

Ed 507. **Seminar.** Hours to be arranged.

Administrative Problems. Jacobson, Tope, Carlson.

Advanced School Law.

Change in Organizations. Carlson.

Education and the Humanities.

Nature and Problems of Administrative Behavior. Jacobson, staff.

Problems of Government Finance.

Research Design.

Scope and Method of the Social Sciences. Tope, staff.

School Business Administration. Hines.

*Ed 508. **Workshop.** Hours to be arranged.

Ed 580. **School Personnel Administration.** 3 hours.

School personnel relationships in their organizational and societal context; factors in upgrading personnel, salary scheduling, work load, tenure; staff negotiations.

Ed 572. **Public School Administration.** 3 hours.

Interpersonal relationships in administration; school-board powers, duties, roles, relationships; the superintendency—roles, responsibilities, issues, problems; problems of staff personnel; student personnel problems at the local district level; problems and issues relating to the development of effective school-community relationships. Tope.

Ed 573. **Public School Organization.** 3 hours.

The schools in relation to state and Federal agencies; the intermediate unit, its purposes, organization, trends; local school districts—problems of organization, plant planning and management, school business administration, transportation, school finance, textbooks and supplies; extralegal agencies affecting education. Tope.

Ed 575. **School Finance.** 3 hours.

The problems of school finance and business management; sources of school income; relationship to the state financial structure; expenditure analysis; budgeting and accounting. Includes the construction of a school budget. Prerequisite: work in administration and organization; or consent of instructor. Farner.

Ed 576. **School Buildings.** 3 hours.

Study of the problems involved in planning, financing, and construction of school buildings; care and maintenance of buildings; problems of equipment. Includes analysis of the problems of a specific district. Prerequisite: work in administration and organization; or consent of instructor. Hines.

Research Careers

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Ed 407. **Seminar.** (G) Hours to be arranged.

Foundations of Research in Educational Organization.

Philosophy of Educational Research.

Introduction to Educational Research.

Conceptualization and Development of the Research Problem.

The School as a Social Organization.

Communication in Organizations.

* No-grade course.

GRADUATE COURSES

- *Ed 501. **Research.** Hours to be arranged.
- Ed 505. **Reading and Conference.** Hours to be arranged.
- *Ed 503. **Thesis.** Hours to be arranged.
- Ed 507. **Seminar.** Hours to be arranged.
Communication.
Organizational Analysis.

Curriculum and Supervision

GRADUATE COURSES

- *Ed 501. **Research.** Hours to be arranged.
- *Ed 503. **Thesis.** Hours to be arranged.
- Ed 505. **Reading and Conference.** Hours to be arranged.
- Ed 507. **Seminar.** Hours to be arranged.
- *Ed 508. **Workshop.** Hours to be arranged.
- Ed 522. **Secondary-School Curriculum.** 3 hours.
Overview of the secondary-school curriculum, with emphasis on the various subject fields; organization of the school for curriculum development; educational objectives; the course of study; evaluation of the secondary-school curriculum. Hearn.
- Ed 527. **Secondary-School Administration and Supervision.** 3 hours.
The secondary-school principalship; principles of administration, staff relationships, public relations, and professional growth; business administration; administration of guidance services, curriculum, and school activities; evaluation of the secondary school. Hearn.
- Ed 552. **Elementary-School Problems.** 4 hours.
A study of current problems, issues, significant research, and theories in the field of elementary education. Sandin.
- Ed 553. **Elementary-School Curriculum.** 4 hours.
A systematic study of the elementary-school curriculum, including pupil needs in everyday life situations, objectives, essentials of a good program, varying curriculum designs, organization of learning experiences, evaluation of learning, and appraisal of newer curriculum practices. Sandin.
- Ed 554. **Elementary-School Supervision and Administration.** 4 hours.
For mature students of elementary education who are preparing for administrative or supervisory positions. Characteristics of good elementary schools, leadership responsibilities and processes, school organization patterns, pupil personnel policies, school-community relationships. Sandin.
- Ed 559. **Evaluation of Secondary-School Programs.** 3 hours.
Appraisal of secondary schools on the basis of evaluative criteria, with special attention to the work of the National Study of Secondary School Evaluation. Hearn.
- Ed 560. **Secondary-School Problems.** 3 hours.
Current problems in the field of secondary education. Hearn.
- Ed 565. **Curriculum Foundations.** 4 hours.
Implications of basic social, philosophical, and psychological factors in curriculum planning and organization; historical background; techniques of curriculum planning. Wood.

* No-grade course.

Ed 566. Curriculum Construction. 4 hours.

Survey and appraisal of curricular patterns; state and city programs; courses of study in major subject areas; techniques of course-of-study planning. Wood.

Ed 567. Curriculum Materials. 4 hours.

Effective use and organization of curriculum materials; text and reference books, supplementary pamphlet materials, films and slides, records and recordings, pictures, radio, etc.; programmed learning; techniques of unit construction. Wood.

Ed 571. Junior High-School Curriculum. 3 hours.

Instructional programs appropriate for the early adolescent years, with emphasis upon the various subject fields. Hearn.

Ed 574. School Supervision. 3 hours.

The role of the supervisor in keeping education geared to the changing demands of society; theories of leadership; group processes and individual conference techniques; action research and related approaches to curriculum change; analysis of concrete supervisory problems. Prerequisite: Teaching or administrative experience or consent of instructor.

Higher Education

The program in higher education, offered at the graduate level, includes the following courses, together with seminars, individual study, and research.

GRADUATE COURSES

Ed 501. Research.** Hours to be arranged.Ed 502. Supervised College Teaching.** Hours to be arranged.

Lovell, Tope.

***Ed 503. Thesis.** Hours to be arranged.**Ed 505. Reading and Conference.** Hours to be arranged.**Ed 507. Seminar.** Hours to be arranged.

Administration of the Community College. Van Loan.

Adult Education. Dahl.

College Student Personnel. Hawk.

Education in Developing Countries. Wood.

Programs in the Community College. Van Loan.

Ed 508. Workshop. Hours to be arranged.**Ed 509. Practicum.** Hours to be arranged.**Ed 590. Higher-Education Survey.** 3 hours.

Problems of higher education. Organization, administration, finance; philosophy, purposes, curricula; student and faculty personnel; extension and special services. Wood.

Ed 591. Teacher-Education Survey. 3 hours.

Purposes, needs, and objectives of teacher education; present facilities and types of organization; student-selection procedures; staff; curriculum. Relationships of preservice undergraduate, preservice graduate, in-service campus, and in-service field training. Kambly.

Ed 592. Administration of Colleges and Universities. 3 hours.

The administration of liberal arts colleges and of complex institutions, such as universities; business affairs; administration of schools and departments. Stoke.

Ed 597. Methods of College Teaching. 3 hours.

Psychology of learning, methods and techniques of college teaching, preparation for teaching, evaluation of teaching. Wood.

* No-grade course.

School of Health, Physical Education, and Recreation

ARTHUR A. ESSLINGER,* Ph.D., Dean of the School of Health, Physical Education, and Recreation.

Health Education

Professors: F. B. HAAR (department head), MIRIAM L. TUCK.

Associate Professors: E. D. FURRER, ROBERT E. KIME, WARREN E. SMITH.

Assistant Professors: L. D. JACOBSON, RICHARD SCHLAADT.

Instructors: ROBERT DIONNE, RICHARD GRANT, MICHAEL HOSOKAWA.

Assistants: MARY BREEN, MORLON LEWIS.

Physical Education

Professors: FLORENCE D. ALDEN (emeritus), W. J. BOWERMAN, W. B. BRUMBACH, L. J. CASANOVA, H. H. CLARKE, A. A. ESSLINGER, EUGENE EVONUK, L. A. HARRIS, F. H. KIRSCH, E. R. KNOLLIN (emeritus), W. P. RHODA, P. O. SIGERSETH, V. S. SPRAGUE, P. R. WASHKE, JANET G. WOODRUFF (emeritus).

Associate Professors: STEPHEN BELKO, J. W. BORCHARDT, RICHARD GESER, JESSIE PUCKETT, E. R. REUTER, EDNA P. WOOTEN.

Assistant Professors: M. B. COLEY, G. L. FREI, B. CORLEE MUNSON, J. J. ROCHE, DONALD VAN ROSSEN, LOIS J. YOUNGEN.

Instructors: SANDRA ACKINCLOSE, JACK ADLER, DIANE BAXTER, L. A. BELLISIMO, BERGE BORREVIK, CLIFFORD BRUBAKER, ELIZABETH GLOVER, BETTY GRIFFITH, DONALD MCGAVERN, P. I. MCHUGH, R. O. OFFICER, KARLA RICE, J. A. ROBINSON, SONDRASEKERES, BECKY SISLEY, RICHARD J. SMITH, ELBA STAFFORD, E. F. SUMMERS.

Lecturers: R. O. RANKIN, D. B. SLOCUM.

Assistants: VIRGINIA ARVIDSON, DONALD BAILEY, JEAN BATEMAN, BRIAN BLANKSBY, HANS BUHRMANN, MICHELE S. COCHRAN, RICHARD CONANT, LEONARD DIETT, JAMES DINUCCI, NORMAN EBURNE, BRIAN KELLEY, THOMAS KIDD, KATHLEEN KNOWLES, STEPHEN KURTH, APARICIO MEQUI, JEFFREY MILLER, GRAHAM NEIL, D. A. PHILLIPS, STANLEY RASMUSSEN, PETER RAVEN, LAINE SANTA MARIA, DAVID SEKERES, HELEN SMITH, LEO TEGHTMEYER, HUGH VENABLES, RONALD WALP, NOREEN WOLCOTT.

Dance

Professor: M. FRANCES DOUGHERTY (department head).

Assistant Professor: K. WRIGHT DUNKLEY.

Instructors: DEBORAH APPLETON, LINDA HEARN, BRUNO MADRID.

Assistant: TERRIE HAYS.

Recreation and Park Management

Professors: L. S. RODNEY (department head), F. B. NICKERSON.

Associate Professors: A. L. ELLINGSON, C. M. REICH.

* On sabbatical leave, fall term, 1967-68.

Assistant Professors: PHYLLIS M. FORD,* ADELL McMILLAN.

Instructor: LARRY DECKER.

Lecturers: LOUIS FARNSWORTH, JEWEL GODDARD, ROBERT HAWORTH, JERRY JACOBSON, DONALD LINDLEY, W. R. MATSLER, WILLIAM SPARKS, GARY WALKER.

THE SCHOOL OF HEALTH, PHYSICAL EDUCATION, AND RECREATION is responsible for three programs: (1) service courses in health education and physical education for men and women; (2) intramural sports for men and women; (3) professional study, both undergraduate and graduate, in health education, physical education, dance, and recreation and park management.

Service Courses. Courses providing instruction in recreational skills and in the principles of physical conditioning and health are offered for all students.

The University graduation requirements for all students include five terms of physical education and a course in health education, unless the student is excused by the dean of the school.[†] Students may be exempted from one or more terms of the physical-education requirement and from the health-education requirement on the basis of proficiency examinations.

Courses which satisfy the physical-education requirement are: PE 180 for women, PE 190 for men; not more than 1 hour of credit may be earned in these courses in any one term. The student's program in physical education is adjusted to his needs and abilities; whenever possible, the work is adapted to remedy physical disabilities. Majors and other students preparing for the teaching of physical education in the schools satisfy the requirement with a series of professional activity courses. A student may not take a service course and a professional activity course for credit at the same time.

Both men and women students satisfy the health-education requirement with HE 150 or HE 250. Students are urged to satisfy this requirement during their freshman year.

Elective service courses (regularly scheduled classes) in physical activities are offered for juniors and seniors. A total of not more than 12 term hours may be earned toward graduation in lower-division and upper-division service courses in physical education. Not more than 1 hour of credit may be earned in any one term.

Intramural Sports. The School of Health, Physical Education, and Recreation sponsors a comprehensive program of intramural sports. A primary purpose of the program is to encourage sportsmanship and friendly relations among the students of the University through athletic competition. Individual and group competitive sports for men are organized under the guidance of the department for men. The department for women provides a wide variety of sports for women students. Student leadership for women's athletics is furnished by the Women's Recreational Association.

Undergraduate Study. Undergraduate major programs are offered in the fields of health education, physical education, dance, and recreation and park management. Graduates of the school hold positions as: high-school teachers of physical education and health education; athletic coaches; directors of high-school athletics; supervisors of health and physical education; community recreation and playground directors; leaders in Y.M.C.A., Y.W.C.A., and other youth-organization work; directors of restricted and corrective physical education; workers in the field of physical therapy; college and university teachers and research workers in child growth, health education, physical education, and dance.

* On sabbatical leave, winter term, 1967-68.

† Students who have completed six months of active military service in the Armed Forces of the United States are exempt from three terms of the physical-education requirement.

Graduate Study. The School of Health, Physical Education, and Recreation offers graduate work leading to the Master of Arts, Master of Science, Doctor of Education, and Doctor of Philosophy degrees.

Candidates for the master's degree may major in one of the following seven areas or in a combination of related areas: (1) administration of programs, buildings and grounds; (2) school health education; (3) corrective activities and physical therapy; (4) recreation and park management; (5) anatomy, kinesiology, and physiological training and conditioning factors; (6) morphological, physiological, and motor aspects of child growth; (7) measurement and evaluation in physical education.

Ph.D. and D.Ed. candidates are expected to concentrate in one of the following fields of specialization: (1) administration; (2) health education; (3) child growth and development; (4) corrective physical education; (5) scientific bases of physical education; (6) recreation and park management. The Ph.D. dissertation must be an original contribution to knowledge.

Advance study in dance may be arranged under the interdisciplinary master's program (see page 118).

Fees. Payment of regular University registration fees entitles every student to the use of gymnasiums, pools, and showers, to the use of gymnasium and swimming suits and towels, and to laundry service, whether or not they are registered for physical-education courses. Students are urged to make full use of the gymnasium facilities for exercise and recreation.

Facilities. The University's buildings and playfields devoted to physical-education instruction and recreation occupy a 42-acre tract at the southeast corner of the campus. The Physical Education Building provides offices, classrooms, study halls, and research laboratories for the school and gymnasium facilities for men. The building is planned especially for professional preparation in physical education, as well as for the recreational needs of students. The men's swimming pool is adjacent to the Physical Education Building.

The women's gymnasium and the women's swimming pool are in Gerlinger Hall, west of the Physical Education Building across University Street. There are playing fields for women south and west of Gerlinger.

Adjoining the Physical Education Building to the south is McArthur Court, basketball pavilion and athletic center of the Associated Students. McArthur Court seats more than 10,000 spectators.

Playing fields located east and south of the Physical Education Building provide excellent facilities for outdoor class instruction and for intramural and intercollegiate sports. Hayward Stadium, Associated Students athletic field, has seats for 23,000 spectators. North of Hayward Stadium are six standard concrete tennis courts. Eight additional courts are located south of the Education Building. Autzen Stadium, a 41,000-seat football stadium, was dedicated in the fall of 1967. It is located across the Willamette River from the main University campus.

Institute of Recreation Research and Service. The Institute of Recreation Research and Service, maintained by the School of Health, Physical Education, and Recreation in conjunction with its instructional program in recreation and park management, assists communities in the development of recreation, park, and youth-service resources, conducts research in various aspects of recreation development, and provides information on research findings and nation-wide community experience as a basis for the solution of recreation problems. The Institute sponsors conferences and workshops, and welcomes requests for information and assistance from public and private recreation agencies.

Secondary-School Teaching of Health and Physical Education. For certification as a teacher of health and physical education in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation. The following programs meet state standards and the requirements for recommendation by the University of Oregon.

Physical Education. The program includes required undergraduate courses and additional courses required for permanent certification after a fifth year of preparation:

UNDERGRADUATE		Term Hours
Principles & Practices of Physical Education (PE 341)	.....	3
Class Techniques in Physical Education (PE 342)	.....	3
Organization & Admin. of Physical Educ. (PE 343)	.....	3
The School Program (PE 445)	.....	3
Human Anatomy (Bi 391, 392)	.....	6
Human Physiology (Bi 312, 313)	.....	6

PROFESSIONAL ACTIVITIES (MEN)		
Fundamentals of Body Movement & Games, Track and Field (PE 195)	.....	4
Elementary Apparatus (PE 295)	.....	2
Folk, Social & Square Dance (PE 395)	.....	2
Team Sports, Badminton, Tennis (PE 395)	.....	4
Wrestling & Weight Training (PE 495)	.....	2

PROFESSIONAL ACTIVITIES (WOMEN)		
Tumbling, Apparatus, Track & Field, Individual & Dual Sports, Swimming (PE 294)	.....	4
Basic Physical Education, Field Sports, Track, Square & Ballroom Dancing, Softball, Swimming (PE 394)	.....	6
Contemporary Dance, Basketball, Volleyball (PE 494)	.....	4

FIFTH YEAR		
Corrective Physical Education (PE 444)	.....	3
Tests & Measurements in Physical Education (PE 446)	.....	3
Kinesiology (PE 472)	.....	3
Physiology of Exercise (PE 473)	.....	3

Health Education. The program includes required undergraduate courses and additional courses required for permanent certification after a fifth year of preparation:

UNDERGRADUATE		
General Biology (Bi 101, 102, 103)	.....	12
School Health Services (HE 465)	.....	3
Human Anatomy (Bi 391, 392)	.....	6
Human Physiology (Bi 312, 313)	.....	6
Nutrition (HEc 225)	.....	3
Safety Education (HE 359)	.....	3
First Aid (HE 252)	.....	3
Personal Health Problems (HE 361)	.....	3
Community Health Problems (HE 362)	.....	3
Communicable & Noncommunicable Diseases (HE 363)	.....	3
Health Instruction (HE 464)	.....	3

FIFTH YEAR		
Advanced Health Instruction (HE 543)	.....	3
Mental Health (HE 506)	.....	3
Administration of School Health Education (HE 552)	.....	3

Health and Physical Education. The Oregon State Department of Education has set special subject-preparation requirements for positions involving the teaching of both health and physical education. A program for the satisfaction of these requirements may be arranged with advisers in the School of Health, Physical Education, and Recreation.

Physical Education

THE BASIC UNDERGRADUATE CURRICULUM in physical education, leading to the Bachelor of Science or Bachelor of Physical Education degree, provides a strong program of professional work. During his freshman and sophomore years, the student obtains a sound foundation in the liberal arts and in the sciences basic to professional studies, supplemented by introductory instruction in physical-education theory and activities. The upper-division program is devoted principally to professional studies.

The basic program is planned to satisfy the usual needs of the student planning to teach physical education in the public schools; it includes sufficient work in health education to enable him to qualify for positions which require the teaching of both physical education and health education. Modifications of this program may be arranged for students with special interests in such fields as the dance, social studies, and physical therapy. Students who elect a minor in a field other than health education are required to complete an approved program in the second field, including 21 term hours of work beyond the introductory sequence in the field.

Physical education majors may select a program of studies which will prepare them to teach at any grade level, kindergarten through high school. This program includes professional activities and theory courses dealing with the instructional program at the elementary as well as the secondary level.

Superior students who are interested in preparing for careers in the scientific and research aspects of physical education may arrange a program in which greater concentration in biology, physiology, chemistry, and mathematics is substituted for certain courses directly related to preparation for secondary-school teaching.

Lower Division	Term Hours
General Biology (Bi 101, 102, 103).....	12
Elementary Chemistry (Ch 101, 102, 103).....	12
Nutrition (HEe 225)	2
Psychology	9
Introduction to Health & Physical Education (PE 131).....	2
First Aid (HE 252)	3
Professional activities	12
Upper Division	
Human Anatomy (Bi 391, 392).....	6
Human Physiology (Bi 312, 313).....	6
Princ. & Practices of Physical Education (PE 341).....	3
Class Techniques in Physical Education (PE 342).....	3
Organ. & Admin. of Physical Education (PE 343).....	3
Tests & Measurements in Physical Educ. (PE 446).....	3
School Program (PE 445).....	3
Corrective Physical Education (PE 444).....	3
Kinesiology (PE 472), Physiology of Exercise (PE 473).....	6
Personal Health Problems (HE 361), Community Health Problems (HE 362), Communicable & Noncommunicable Diseases (HE 363).....	9
Health Instruction (HE 464), School Health Service (HE 465).....	6
Professional activities	12

Social Science Option. Majors in physical education who wish to place an emphasis on the social sciences in their studies in the liberal arts may, with the approval of the dean of the School of Health, Physical Education, and Recreation, substitute selected social science courses for a portion of the science requirement in the basic undergraduate curriculum.

Dance Option. The dance option combines professional work in physical education with special instruction in dance and related arts. There are excellent vocational opportunities in the fields of physical education and recreation for persons whose professional training includes this instruction. In addition to the dance

option, the School of Health, Physical Education, and Recreation offers a major curriculum in the dance as a contemporary art form (see pages 347-348).

Pre-Physical-Therapy Option. Standard schools of physical therapy, which are usually operated in conjunction with medical schools, have admission requirements with strong emphasis on foundation work in the basic sciences. The sciences included in the basic curriculum in physical education, together with the understanding of body movement and exercise activities gained in professional physical-education courses, provide excellent preparation for physical-therapy training. Students interested in this work may arrange a special program, within the general framework of the physical-education major, but excluding courses especially designed to meet the requirement for a teacher's certificate.

Minor for Elementary Teachers. Majors in elementary education may, in consultation with advisers in the School of Health, Physical Education, and Recreation, arrange a minor in physical education, including selected theory and activities courses in addition to work required for elementary teacher certification.

Service Courses for Men

LOWER-DIVISION COURSES

PE 190. **Physical Education (Men).** 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division men students. 3 hours a week.

UPPER-DIVISION COURSES

PE 390. **Physical Education for Junior and Senior Men.** 1 hour each term, six terms.

3 hours a week.

Service Courses for Women

LOWER-DIVISION COURSES

PE 180. **Physical Education (Women).** 1 hour each term, six terms.

A variety of activities taught for physiological and recreational values. Special sections for restricted and corrective work. A total of five terms required for all lower-division women students. 3 hours a week.

UPPER-DIVISION COURSES

PE 380. **Physical Education for Junior and Senior Women.** 1 hour each term, six terms.

3 hours a week.

Professional Courses

LOWER-DIVISION COURSES

PE 131. **Introduction to Health and Physical Education.** 2 hours fall or spring.

Professional orientation; basic philosophy and objectives; professional opportunities and qualifications. Puckett.

PE 194. **Professional Activities (Women).** 1-2 hours each term, three terms.

For professional students. Instruction and practice. Fall: field sports, basic physical education. Winter: tumbling, basketball. Spring: elementary contemporary dance, tennis.

- PE 195. Professional Activities (Men).** 2 hours each term, three terms.
For professional students. Methods, teaching techniques, and basic skills. Fall: fundamentals of body movement, games. Winter: elementary aquatics. Spring: track and field.
- PE 221. Games for the Elementary School.** 1 hour.
Creative games, games of low organization, and fundamental sport skills suitable for elementary children. Munson.
- PE 222. Posture and Developmental Activities.** 1 hour.
The mechanics of movement, posture, conditioning exercises, stunts, tumbling, self-testing, apparatus, and evaluation for the elementary-school child. Munson.
- PE 223. Rhythms for the Elementary School.** 1 hour.
Dance program for children in the elementary school, grades one through six. Locomotor and nonlocomotor movement; dramatization and creative dance studies; singing games, traditional dance skills, and folk dances for children of the intermediate grades. Munson.
- PE 291. Life Saving in Aquatic Programs.** 2 hours.
Basic skills of life saving in aquatic programs; leads to American Red Cross certification in senior life saving. Open to men and women students who pass qualifying tests in swimming.
- PE 292. Swimming and Water Safety Instruction.** 2 hours.
Analysis, methods of instruction, and evaluation at all age levels; leads to American Red Cross certification in water safety instruction. Open to men and women students who pass qualifying tests in swimming and life saving.
- PE 294. Professional Activities (Women).** 1-2 hours each term, three terms.
For professional students. Instruction and practice. Fall: swimming, badminton. Winter: tumbling, trampoline, and apparatus. Spring: track and field, golf.
- PE 295. Professional Activities (Men).** 2 hours each term, three terms.
For professional students. Methods, teaching techniques, and basic skills. Fall: baseball, basketball. Winter: elementary apparatus. Spring: football and touch football.

UPPER-DIVISION COURSES

- PE 341. Principles and Practices of Physical Education.** 3 hours fall.
An interpretative study and analysis of the principles and practices of physical education, through their historical development and in their present application and significance. Sprague.
- PE 342. Class Techniques in Physical Education.** 3 hours winter.
Organizing and conducting physical-education classes in secondary schools. Sprague, Puckett.
- PE 343. Organization and Administration of Physical Education.** 3 hours spring.
Planning and organizing the use of buildings, grounds, and recreational areas for the physical-education program; purchase and care of equipment; budgeting equipment and operating costs. Sprague.
- PE 344. Administration of Aquatic Programs.** 3 hours spring.
Organization and administration of aquatic programs. Open to men and women majors, and to others with consent of instructor.
- PE 361. Care and Prevention of Injuries.** 3 hours winter.
Bandaging, massage, and other specialized mechanical aids for the prevention of injuries. Analysis of types of injuries; emergency procedures. Prerequisite: Bi 391, 392. Rhoda, Sigerseth.
- PE 394. Professional Activities (Women).** 1-2 hours each term, three terms.
For professional students. Advanced practice and teaching techniques. Fall:

fundamental activities, field sports, or dance composition. Winter: folk, square, and ballroom dance. Spring: softball, swimming.

PE 395. Professional Activities (Men). 2 hours each term, three terms.

For professional students. Methods, teaching techniques and basic skills. Fall: tennis and soccer. Winter: dance. Spring: badminton and volleyball.

PE 403. Thesis. Hours to be arranged.

Thesis based on student's own investigation. Subject chosen after consultation with adviser. Credit determined by quality of work done.

PE 405. Reading and Conference. Hours to be arranged.

Reading and assignments in connection with other courses for extra credit. Honors readings. Prerequisite: consent of instructor; approval of the dean.

PE 406. Special Problems. Hours to be arranged.

Prerequisite: approval of the dean.

PE 409. Practicum. Hours to be arranged.

PE 420. Methods in Elementary-School Physical Education. 3 hours.

Program development; methods of instruction in elementary-school physical education. The purposes and requirements of the elementary physical-education program, with emphasis on program planning, methods, and materials of instruction. Prerequisite: PE 221, 222, 223. Munson.

PE 444. Corrective Physical Education. 3 hours spring.

Survey of common deviations of posture and feet, functional disturbances, and crippling conditions found in school children. Consideration of the extent and limitations of the teacher's responsibility for their amelioration or improvement. Prerequisite: Bi 391, 392; PE 472.

PE 445. The School Program. 3 hours winter.

Construction of physical-education and intramural programs, on the basis of accepted principles, criteria, functions, and evaluations; emphasis on integration with the total school program. Prerequisite: PE 341, PE 342. Sprague.

PE 465. Football Coaching. 3 hours winter.

Systems of play, strategy, responsibilities of the coach, public relations, conference organization. Frei.

PE 466. Basketball Coaching. 2 hours winter.

Coaching methods and problems. Fundamentals of team play; comparison of systems; strategy; training, conditioning; selection of men for positions. Belko.

PE 467. Baseball Coaching. 2 hours spring.

Review of fundamentals, with emphasis on methods of instruction; problems and duties of the baseball coach, including baseball strategy, baseball psychology, training, conditioning. Kirsch.

PE 468. Track Coaching. 2 hours spring.

Principles of training; development of performance for each track event; selection of men for different events; conducting meets. Laboratory experience in PE 195. Bowerman.

PE 472. Kinesiology. 3 hours spring

Action of muscles involved in fundamental movements, calisthenics, gymnastics, and athletics. Prerequisite: Bi 391, 392. Sigereth.

PE 473. Physiology of Exercise. 3 hours spring.

Physiological effects of muscular exercise, physical conditioning, and training; significance of these effects for health and for performance in activity programs. Prerequisite: Bi 312, 313. Sigereth.

PE 494. Professional Activities (Women). 1-2 hours each term, three terms.

For professional students. Advanced practice and teaching techniques. Fall: basketball-volleyball officiating, intermediate contemporary dance. Winter: contemporary dance. Spring: archery, bowling, tennis.

PE 495. **Professional Activities (Men).** 2 hours each term, three terms.

For professional students. Methods, teaching techniques, and basic skills. Fall: wrestling and weight training. Winter: advanced apparatus. Spring: advanced aquatics or golf, handball, archery.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

PE 408. **Workshop.** (g) Hours to be arranged.

PE 421, 422, 423. **Foundations of Elementary-School Physical Education.** (g) 3 hours each term.

Anatomical and physiological factors; kinesiological factors; motor-skill development factors basic to physical education in the elementary school.

PE 424. **Administration of Elementary-School Physical Education.** (g) 3 hours

Modern trends in elementary-school physical education; duties of the physical-education specialist; organization and administration at the primary, intermediate, and upper-grade levels; evaluative procedures and techniques; the role of elementary physical education in outdoor education. Prerequisite: PE 221, PE 223, PE 420, or consent of instructor. Munson.

PE 446. **Tests and Measurements in Physical Education.** (G) 3 hours.

Use of tests and measurement in physical education; evaluation of objectives, programs, and student achievement through measurement techniques. Reuter.

GRADUATE COURSES

*PE 501. **Research.** Hours to be arranged.

*PE 503. **Thesis.** Hours to be arranged.

PE 505. **Reading and Conference.** Hours to be arranged.

Prerequisite: approval of the dean.

PE 506. **Special Problems.** Hours to be arranged.

Study of selected problems in the field of physical education. Prerequisite: approval of the dean.

PE 507. **Seminar.** Hours to be arranged.

Anatomical, Physiological, and Kinesiological Bases of Physical Education.
Body Growth and Development through Physical Education.
Administration of Physical Education Service Programs.
Philosophy of Physical Education.
Advanced Study in Motor Learning.
Current Literature in Physical Education.

PE 508. **Workshop.** Hours to be arranged.

PE 509. **Practicum.** Hours to be arranged.

Practical experience in handling corrective cases; to be taken in conjunction with PE 521, PE 522, PE 523.

PE 515. **History and Theories of Physical Education.** 3 hours fall.

The history of physical education from the Greeks to modern times; emphasis on modern development. Washke.

PE 518. **Current Movements in Physical Education.** 3 hours.

The different schools of thought and practice which determine the purposes and procedures in the professional field of physical education. Analysis of the Oregon and other regional public school physical-education programs. Washke.

PE 520. **Developmental Program in Physical Education.** 3 hours.

Programs to meet individual physical-fitness and social needs through physical-education activities; case-study techniques, developmental programs, development of social traits; administrative problems. Prerequisite: PE 444, PE 446. Reuter.

* No-grade course.

PE 521. Basic Procedures in Corrective Physical Education. 3 hours.

Common postural deviations; causes; basic principles underlying the prescription of exercise for those conditions which may be handled safely by the physical-education teacher; methods of referral when advisable. Prerequisite: Bi 391, 392; PE 472. Wooten.

PE 522. Advanced Corrective Procedures. 3 hours.

Survey of the orthopaedic conditions which fall in the province of the corrective physical-education specialist; recommended therapeutic procedures; the orthopaedic examination; organization of the corrective physical-education program in schools and colleges. Prerequisite: PE 521 or consent of instructor. Wooten.

PE 523. Physical Education of the Handicapped. 3 hours.

The major crippling conditions, such as cerebral palsy and poliomyelitis, and functional disturbances, such as cardiac and respiratory conditions; planning the physical-education program for these conditions. Wooten.

PE 527. Techniques of Relaxation. 3 hours.

The common causes of fatigue and neuromuscular hypertension; methods of combating them. Theories underlying techniques of relaxation; application of these techniques in daily living and in activities.

PE 531. Muscle Testing and Therapeutic Exercise. 3 hours.

Fundamentals of muscle re-education. Methods of determining specific muscle weaknesses; restoration of normal function following injury.

PE 532. Heat Therapy and Massage. 3 hours.

The theory and technique of the use of heat and cold as first-aid measures and as adjuncts to rehabilitative procedures practiced by physical educators. The commonly used techniques of massage, their physiological and mechanical effect, and their application by physical educators.

PE 533. Motor Skill Learning. 3 hours.

Review of the psychology of learning as it pertains to motor skills; research bearing upon the teaching and learning of gross motor skills. Prerequisites: PE 517, PE 540, at least one year's teaching experience. Brumbach.

PE 540. Statistical Methods in Physical Education. 3 hours fall.

Elementary statistics applied to research, including central tendency, variability, normal probability curve, reliability and correlation. Prerequisite: graduate standing. Clarke.

PE 541. Statistical Methods in Physical Education. 3 hours winter.

Advanced statistics applied to research, including variance analysis, co-variance analysis, partial and multiple correlation, regression equations, chi-square, special correlational techniques, and non-parametric processes. Prerequisite: PE 540. Clarke.

PE 544. Methods of Research. 3 hours.

Study of the methods and techniques of research in health, physical education, and recreation; practice in application to problems of current interest. Geser.

PE 545. Experimental Design in Physical-Education Research. 4 hours.

Techniques and procedures of laboratory research in physical education; construction of tests; technical laboratory tests and their use; design of experiments; application of advanced quantitative methods. Prerequisite: PE 446, PE 540, 541. Clarke.

PE 551. Administration of Physical Education. 3 hours winter.

Organization and administration of the physical-education program at the college level. Esslinger, Rhoda.

PE 552. Administration of Athletics. 3 hours.

Historical development of athletics and their control. Place of athletics in education; purposes, administrative control, management, operational policies, care of equipment and facilities. Sprague.

PE 553. Intramural Organization and Management. 3 hours.

Nature and purposes of intramural programs; history of their development. Departmental organization. Relationship of the program to physical-education instruction. Administrative problems. Washke.

PE 556. Administration of Buildings and Facilities. 3 hours.

Building layout and equipment; the relationship of the various functional units—equipment service, dressing facilities, activity spaces, administrative units, permanent and dismantlable equipment. Rhoda.

PE 557. Supervision of Physical Education for City Supervisors. 3 hours.

The purpose of supervision; supervision of staff, facilities, and areas; departmental organization, regulations, and policies. Sprague.

PE 558. Curriculum Construction in Physical Education. 3 hours.

Basic elements and procedures of curriculum construction in physical education; special application at the city, county, and state levels. For supervisors and administrators of physical-education programs. Sprague.

PE 559. Professional Preparation in Physical Education. 3 hours.

Historical development of professional preparation in the field of physical education; curriculum, evaluation, and recruitment in the development and conduct of teacher-education programs in physical education. Sprague.

PE 561. Foundations of Physical Growth. 3 hours.

Concept of growth, objectives in studying growth, procedures in collection and analysis of growth data. Physical growth from the beginning of prenatal life to the close of infancy. Prerequisite: Bi 391, 392, PE 472, PE 540. Munson.

PE 562. Changes in Body Size and Form During Childhood and Adolescence. 3 hours.

Growth in external dimensions and proportions from late infancy to early adulthood. Differences associated with sex, puberty, socio-economic status, race, secular periods, health regimen. Prerequisite: PE 561. Munson.

PE 563. Growth of Body Tissues and Organs. 3 hours.

Study of materials important to teachers and others concerned with child growth. Ossification of the child's skeleton, calcification and eruption of teeth, morphologic development of heart and voluntary musculature, age changes in subcutaneous adipose tissue. Prerequisite: PE 561. Munson.

PE 564. Morphologic and Physiologic Appraisalment of School Children. 3 hours.

Critical examination of various proposals for evaluating individual status and progress; emphasis on measurement proposals suitable for use in school health and physical-education programs. Prerequisite: PE 446 or HE 465.

PE 566. Research Methodology for Child Growth. 3 hours.

Anthropometric instruments, landmarks, and methods; reliability of measurements and ratings; application of biometric procedures.

PE 567. Motor Development in Infancy and Childhood. 3 hours.

Study of the acquisition of motor skills during the first decade of life. Prerequisite: PE 446 or Psy 460, or consent of instructor.

PE 572, 573. Gross Anatomy. 3 hours each term.

Principles and facts in the fields of myology, osteology, arthrology, neurology, and angiology of importance to college teachers of physical education who give instruction in anatomy, kinesiology, and physiology of exercise. Application to body movement and performance. Prerequisite: Bi 391, 392, or equivalent. Sigerseth.

PE 574. Physiological Principles of Advanced Conditioning. 3 hours.

Physiological principles and facts upon which conditioning for competition in athletic activities and physical performances should be based. Direct application to training for competition in major sports and individual activities. Prerequisite: Bi 312, 313; PE 473. Sigerseth.

PE 575. Mechanical Analysis of Motor Skills. 3 hours.

Analysis of various physical-education activities to determine their relation to laws of physics concerning motion, force, inertia, levers, etc. Prerequisite: Bi 391, 392, PE 472, or equivalent. Sigersteth.

PE 576, 577, 578. Advanced Physiology of Exercise. 3 hours each term.

The physical and chemical mechanisms underlying the major functions of the body. Evonuk.

Dance

CURRICULA IN DANCE leading to the Bachelor of Arts or Bachelor of Science degrees provide theoretical and technical preparation in ballet and folk and modern dance forms. Specialization may be directed toward performance, choreography, teaching, therapy, recreation, or notation.

A program of dance concentration may be elected by students whose major is in another field. This program includes the study of dance as an art form, a social form, and a theater form. Requirements are met by the election of a minimum of 12 term hours of professional dance theory courses, 10 hours in dance laboratories, and two 9-hour sequences in a related discipline.

A graduate program with a concentration in dance is available through the Interdisciplinary Master's Program which is designed to fit the needs, interests, and experience of the individual student.

Requirements for the Bachelor's Degree. Candidates for the bachelor's degree with a major in dance must satisfy all general requirements of the University, elect appropriate sequences in related areas, and complete the professional requirements of the Department of Dance. Departmental requirements are:

Lower Division	Term Hours
Introduction to Dance (D 251)	2
Fundamentals of Rhythm (D 252)	2
Movement Notation (D 253)	3
Dance Laboratory (D 154, D 254)	12
Foreign language or science	24
Personal Health (HE 250)	3
Perception (Psy 212)	3
Social Psychology (Psy 215)	3
Psychology Laboratory (Psy 213, 216, 219)	3
Introduction to Anthropology (Anth 207, 208, 209)	9
Sequences from art, drama, literature, music, or philosophy	18
Upper Division	
Elementary Dance Composition (D 351)	3
Advanced Dance Composition (D 352)	3
Dance Accompaniment (D 353)	3
Dance Laboratory (D 392)	6
Dance Programs and Production (D 451)	3
History of Dance to 1900 (D 452)	3
History of Dance since 1900 (D 453)	3
Techniques of Teaching Contemporary Dance (PE 494)	2
Senior Apprentice (D 454)	6
Problems (Senior Project) (D 454)	9
Aesthetics (Phl 441, 442, 443)	9
Sequence in anthropology or philosophy	9

LOWER-DIVISION COURSES

***D 192. Dance Laboratory.** 2 hours any term.

For professional students. Techniques in folk, ballet, and contemporary dance.

D 251. Introduction to the Dance. 2 hours fall.

An overview of professional and educational aspects of dance, the function

* A maximum of 12 term hours of credit may be earned in D 192, D292, D382.

of dance in society, and the significance of dance as an art form in contemporary culture.

D 252. Fundamentals of Rhythm. 2 hours fall.

Rhythm as a basic factor for movement. Rhythmic devices used in the dance. Notation and rhythmic analysis.

D 253. Movement Notation. 3 hours winter.

A study of the process of recording movement graphically; the conversion of the effort and shape of motion into symbols from which original movement patterns can be reconstructed.

***D 292. Dance Laboratory.** 2 hours any term.

For professional students. Movement theory in folk, ballet, and contemporary dance.

UPPER-DIVISION COURSES

D 351. Dance Composition I. 3 hours fall.

Analysis of the dance medium, and the relationship of the aspects of time, space, and force to that medium. Principles of form basic to dance composition.

D 352. Dance Composition II. 3 hours winter.

Compositional forms and styles in dance. Preclassic and modern dance forms.

D 353. Dance Accompaniment. 3 hours spring.

Function of accompaniment for dance skills and composition. Types of accompaniment—instrumental, electronic percussion, voice. Prerequisite: D 351 or D 352.

***D 392. Dance Laboratory.** 2 hours any term.

For professional students. Elements of performance for folk, ballet, and contemporary dance.

D 403. Thesis. Hours to be arranged.

D 405. Reading and Conference. Hours to be arranged.

D 406. Special Problems. Hours to be arranged.

D 408. Workshop. Hours to be arranged.

D 451. Dance Programs and Production. 3 hours winter.

Production problems of staging, lighting, and costuming for the dance; dance demonstration and concert.

D 452. History of the Dance to 1900. 3 hours fall.

Historical survey of the dance and its relationship to other arts from the basic cultures through the late Middle Ages.

D 453. History of the Dance since 1900. 3 hours spring.

Development of the dance in America. Influences of leading dance artists; dance in education; dance in psychotherapy.

D 492. Dance Apprenticeship. 2 hours any term.

For professional students. Directed activities related to the teaching of dance; selection of materials, class organization and management, student evaluation and teaching.

Health Education

A MAJOR PROGRAM OF UNDERGRADUATE STUDY is offered for students who wish to specialize in health education. A few Oregon public school systems and many schools in other states organize their health instruction as the responsibility of one specially trained teacher. Excellent vocational opportunities

* See page 347, note (*).

are available in such schools and with public and voluntary health agencies for persons with professional training in health education. The curriculum provides a strong basis for graduate work in health education, public health, physical therapy, and the health sciences. The requirements are as follows:

Lower Division	Term Hours
General Biology (Bi 101, 102, 103).....	12
Elementary Chemistry (Ch 101, 102, 103).....	12
Psychology (Psy 211, 212, or Psy 214, 215 and Psy 217 or 218)	9
General Sociology (Soc 204, 205, 206).....	9
Nutrition (HEc 225)	3
First Aid (HE 252)	3
Personal Health (HE 250)	3
Upper Division	
Intro. to Bacteriology (Bi 381), Human Physiology (Bi 312, 313)	9
Human Anatomy (Bi 391, 392).....	6
Safety Education (HE 359)	3
Personal Health Problems (HE 361).....	3
Community Health Problems (HE 362).....	3
Communicable & Noncommunicable Diseases (HE 363).....	3
Introduction to Public Health (HE 364, 365, 366).....	9
Social Health (HE 463).....	3
Health Instruction (HE 464).....	3
School Health Services (HE 465).....	3
Evaluation of School Health Education (HE 466).....	3
Genetics (Bi 422, 424)	6-8
Parasitology (Bi 463) or Intro. to Bacteriology (Bi 382)	4

Dental-Hygiene Option. Students who complete the two-year curriculum in dental hygiene, offered by the University of Oregon Dental School in Portland, may satisfy the requirement for a B.S. degree, with a major in health education, on the satisfactory completion of two additional years of work on the Eugene campus of the University. Under an alternative plan, dental-hygiene students may begin their University work with one year of study on the Eugene campus, transfer to the Dental School for two years, and return to the Eugene campus in their senior year to complete general University and professional requirements for a bachelor's degree and requirements for a major in health education.

Service Courses

LOWER-DIVISION COURSES

HE 150. Health Education. 1 hour any term.

Study of personal health problems which confront the college student; the basic scientific principles of healthful living. Meets the health-education requirement for men or women. Furrer, Grant, Haar, Jacobson, Kime, Smith.

HE 250. Personal Health. 3 hours any term.

Study of the personal health problems of university men and women, with emphasis on implications for family life. Mental health, communicable diseases, degenerative diseases, nutrition. Satisfies the University requirement in health education for men or women. Furrer, Grant, Haar, Jacobson, Kime, Lewis, Puckett, Schlaadt, Smith, Tuck.

HE 251. Community Health. 3 hours winter.

Methods of handling health and sanitation problems in the community, with special reference to water supply, food and milk sanitation, sewage disposal, insect and rodent control; state and county health departments. Grant.

HE 252. First Aid. 3 hours any term.

Immediate and temporary care for a wide variety of injuries or illnesses; control of bleeding, care for poisoning, and proper methods of transportation, splinting, and bandaging. Successful completion of course leads to Red Cross standard, advanced, and instructors' certificates. Dionne, Smith.

Professional Courses

UPPER-DIVISION COURSES

HE 359. Safety Education. 3 hours fall and spring.

Basic principles of safety education; current safety programs as they apply to the school, home, and community. Individual and group projects in the organization of materials for teaching safety education in public schools. Schlaadt, Smith.

HE 361. Personal Health Problems. 3 hours fall.

For health teachers in the public schools. Hygienic care of the body and other personal health problems important in health instruction. Prerequisite: junior standing in health or physical education, or consent of instructor. Kime.

HE 362. Community Health Problems. 3 hours winter.

Basic community health problems important in public school health instruction. Designed primarily for teachers and community leaders. Prerequisite: junior standing or consent of instructor. Grant.

HE 363. Communicable and Noncommunicable Diseases. 3 hours spring.

Nature, prevention, and control of common communicable diseases, considered in relation to health instruction in the public schools. Prerequisite: junior standing in science or health and physical education. Jacobson, Lewis.

HE 364, 365, 366. Introduction to Public Health. 3 hours each term.

Functions and organization of public health; vital statistics; consumer health problems; functions of voluntary and governmental health organizations; health education in Oregon public schools, with special emphasis on health teaching in the junior and senior high schools. Admission after fall term only with consent of instructor. Prerequisite: junior standing in science or health and physical education. Haar.

HE 405. Reading and Conference. Hours to be arranged.

HE 406. Special Problems. Hours to be arranged.

HE 407. Seminar. Hours to be arranged.

HE 409. Practicum. Hours to be arranged.

HE 467. Driver Education. 3 hours spring.

Designed to prepare teachers to conduct driver-education courses in the secondary schools. Use of teaching devices, development of instructional units, behind-the-wheel instruction. Kime, Schlaadt.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

HE 408. Workshop. (g) Hours to be arranged.

HE 450. Elementary-School Health Education. (g) 3 hours any term.

The purposes and requirements of the school health service program, with emphasis on organization and procedures for the school health examination. Organization and presentation of teaching materials based on the health needs of the child, community needs, and school health services. Smith, Tuck.

HE 463. Social Health. (G) 3 hours spring.

Sex education content, methods, and materials appropriate for junior and senior high schools. Prerequisite: senior standing in health education or biology; graduate standing in education or physical education. Kime, Tuck.

HE 464. Health Instruction. (G) 3 hours fall.

Methods and materials in health instruction for junior and senior high schools. Special emphasis on the construction of health teaching units for Oregon secondary schools. Prerequisite: HE 361, 362, 363 or consent of instructor. Schlaadt.

HE 465. School Health Service. (G) 3 hours winter.

Purpose and procedures of health service in the schools; control of common

communicable diseases; technique of pupil health appraisal by the teacher. Prerequisite: HE 361, 362, 363 or consent of instructor. Smith, Tuck.

HE 466. Evaluation of School Health Education. (G) 3 hours.

Appraisal and evaluation of the program in terms of objectives and standards, with special emphasis on health education in Oregon junior and senior high schools. Prerequisite: HE 361, 362, 363, HE 464, 465; or consent of instructor. Kime.

GRADUATE COURSES

*HE 501. **Research.** Hours to be arranged.

*HE 503. **Thesis.** Hours to be arranged.

HE 505. **Reading and Conference.** Hours to be arranged.

HE 506. **Special Problems.** Hours to be arranged.

Study of selected problems in the field of health education.

HE 507. **Seminar.** Hours to be arranged.

Seminars dealing with special aspects of health education are conducted each term. Open to qualified graduate students.

HE 508. **Workshop.** Hours to be arranged.

HE 542. **Basic Issues in Health Education.** 3 hours fall.

Current basic issues and problems in school health education; economic and social forces affecting health education; implications for programs. Haar.

HE 543. **Advanced Health Instruction.** 3 hours winter.

Organization of the public-school health-instruction program; for health teachers, supervisors, and coordinators. Basic steps in the development of the program. Prerequisite: HE 464 or consent of instructor. Smith.

HE 552. **Administration of School Health Education.** 3 hours spring.

Organization and administration of the school health program. Haar.

Recreation and Park Management

THE DEPARTMENT OF RECREATION AND PARK MANAGEMENT offers programs of undergraduate and graduate professional study planned to prepare young men and women for careers in leadership, supervision, and management of recreation, park, youth-serving, and community agencies. The programs provide a broad liberal education, together with professional and technical studies essential for careers in the field. Graduates in recreation and park management become recreation directors in community centers, playgrounds, the armed forces, industries, hospitals, churches, and institutions; directors, supervisors, and secretaries in youth-serving agencies; superintendents and managers of park department and districts; administrators of recreation in cities, counties, and state agencies; directors of camping and outdoor recreation; student union managers; and supervisors in colleges and universities.

The undergraduate major programs lead to the Bachelor of Science degree and provide a foundation for graduate work leading to the Master of Science and doctoral degrees.

Requirements for Bachelor's Degree. The undergraduate curriculum in recreation and park management places strong emphasis on courses designed to give the student a broad liberal education, together with professional study in recreation leadership and management. The requirements include: (1) courses in liberal arts which satisfy general University requirements for a bachelor's

* No-grade course.

degree; (2) a core of basic professional courses; (3) a minimum of 36 term hours in recreation management, including (a) a core of basic professional courses and (b) courses providing concentration in one of five professional options; (4) a minimum GPA of 2.50 in recreational management courses; (5) a minimum of 93 term hours of work outside the School of Health, Physical Education, and Recreation.

Liberal arts requirements include a minimum of 36 term hours in social science, science, or arts and letters.

The professional core required of all majors includes the following courses:

	Term Hours
Recreation in Society (RM 150)	3
History & Theory of Recreation (RM 251)	3
Recreation Leadership (RM 352)	3
Organization & Administration of Recreation (RM 370)	3
School & Community Recreation Programs (RM 499)	3
Recreation Field Work (RM 415)	9

Options are offered in the following five areas of concentration:

Park and Recreation Administration. The option in park and recreation administration is designed to provide preparation for careers in the management of public park and recreation programs and in the supervision and administration of recreation in public and private agencies or institutions. Emphasis is placed on management techniques, managerial problems, park and recreation organization and operation, and recreation programs and service. The work includes training in phases of landscape architecture and urban planning related to recreation. The major requirements, in addition to the core program, are:

	Term Hours
Organization & Administration of Recreation (RM 371)	6
Parks, School Grounds & Recreation Areas (LA 411, 412, 413)	9
Recreation & Natural Resources (RM 492) or Youth Agencies (RM 395)	3
Recreation & Park Facilities (RM 497)	3

Youth Agencies. The youth agencies or community youth services option provides preparation for careers in voluntary youth-serving recreation organizations and clubs (Y.M.C.A., Y.W.C.A., boys, girls, and service clubs, etc.). Emphasis is placed on community leadership, group work, and the role of recreation in the social structure of the community. The major requirements, in addition to the core program are:

	Term Hours
Camp Counseling (RM 290) or approved elective	3
Camp Administration (RM 391)	3
Youth Agencies (RM 394, 395) or approved elective	6
Human Development & Learning (Ed 315)	5

Recreation Leadership. The option in recreation leadership is designed to prepare students for leadership in recreation programs in community and youth centers, playgrounds, hospitals, institutions, service clubs in the armed forces, etc. The major requirements, in addition to the core program, are:

	Term Hours
Art in Elementary School (Art 311, 312)	4
Music Fundamentals (Mus 321, 322)	4
Camp Counseling (RM 290)	3
Youth Agencies (RM 394) or approved elective	3
Recreation Leadership (RM 352)	3
First Aid (HE 252)	3
Learning & Thinking (Psy 211)	3

Program Specialties. The option in program specialties is designed to prepare students for careers in cultural program areas such as music, art, dance, or drama, or in special sports areas. Emphasis is placed on the development of a high degree

of competency in a field of specialization currently represented in recreation programs. In consultation with his adviser, the student elects from 24 to 35 hours in courses in a field of specialization. The major requirements in addition to the core program, are:

	Term Hours
Learning and Thinking (Psy 211)	3
Camp Counseling (RM 290) or approved elective	3
Youth Agencies (RM 394) or approved elective	3
Recreation Leadership (RM 352)	3
Human Development & Learning (Ed 315)	5
Courses in area of specialization	24-35

Camping and Outdoor Education. The option in camping and outdoor education is designed to prepare students for careers in camp management, supervision, or outdoor education in the public schools. The major requirements, in addition to the core program, are:

	Term Hours
Music Fundamentals (Mus 321, 322)	4
Camp Counseling (RM 290)	3
Recreation and Park Facilities (RM 497)	3
Camp Administration (RM 391)	3
Principles of Outdoor Education (RM 490)	3
Recreation & Natural Resources (RM 492)	3
Science	9-12

LOWER-DIVISION COURSES

RM 150. Recreation in Society. 3 hours.

Concept of community recreation; scope of recreation in American life; the role of recreation, parks, and sports in human experience and in the structure of community living.

RM 251. History and Theory of Recreation. 3 hours fall.

Introduction to the basic historical and philosophical foundations of leisure and recreation. Reich.

RM 290. Camp Counseling. 3 hours winter.

Orientation to youth work in camps; examination of the values and objectives of organized camps; understanding campers, camp programs, and staff responsibilities. Ford.

UPPER-DIVISION COURSES

RM 352, 353. Recreation Leadership. 3 hours.

First term: techniques of group and individual leadership in recreation programs. Examination of playground and community center leadership and program. Second term: leadership and programming in social recreation activities. Ford.

RM 370, 371. Organization and Administration of Recreation. 3 hours each term.

Administration of public recreation and park services provided by municipal, district, county, state, and Federal departments; legal provisions; organization; finance; public relations. Rodney.

RM 391, 392. Camp Administration. 3 hours each term.

Selected organizational and administrative aspects of organized camping including: site development, personnel, health, safety, sanitation, programs, finance, and public relations; emphasis on national standards and local regulations. Ford, Rodney.

RM 394, 395. Youth Agencies. 3 hours each term.

First term: survey of youth-serving organizations; role of agencies in relation to adolescent-youth problems and character development. Second term: administrative organization and management problems of social and voluntary agencies.

RM 396. Social Recreation. 3 hours.

Methods of developing effective leadership in social-recreation activities.

RM 405. Reading and Conference. Hours to be arranged.**RM 406. Special Problems.** Hours to be arranged.

Prerequisite: approval of department head.

RM 407. Seminar. Hours to be arranged.

Recreation Budgeting and Finance. Rodney.

Recreation Supervision. Rodney.

Park Management. Reich.

Student Union Management. Ellingson.

College Activity Programming. McMillan.

Youth and Leadership. Nickerson.

RM 409. Practicum. Hours to be arranged.**RM 415. Recreation Field Work.** Hours to be arranged (9 hours maximum credit).**UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT****RM 408. Workshop.** (g) Hours to be arranged.**RM 490. Principles of Outdoor Education.** (G) 3 hours.

Development of outdoor education and school camping; theories, practices, educational significance; organization, administration, and program planning. Ford.

RM 492. Recreation and Natural Resources. (G) 3 hours.

Administration of natural resources at the national, state, local, and private levels; emphasis on the understanding of the functions of the recreation profession in the administration of public wild lands. Ford.

RM 497. Recreation and Park Facilities. (G) 3 hours fall.

Acquisition, development, construction, and maintenance of recreational areas, facilities, and buildings. Reich.

RM 499. School and Community Recreation Programs. (G) 3 hours.

Principles of program planning for school and community; types of programs considered in relation to sex and age and individual interests, needs, and capacities. Reich.

GRADUATE COURSES***RM 501. Research.** Hours to be arranged.***RM 503. Thesis.** Hours to be arranged. Ford, Reich.**RM 505. Reading and Conference.** Hours to be arranged.

Prerequisite: approval of department head.

RM 506. Special Problems. Hours to be arranged.

Study of selected problems in recreation. Prerequisite: approval of department head.

RM 507. Seminar. Hours to be arranged.

Basic Issues in Parks and Recreation.

Public Park Administration.

Problems of Recreation Finance.

Administrative Problems of Recreation. Rodney.

Philosophical Foundations of Recreation. Reich.

Youth and Leadership. Nickerson.

RM 508. Workshop. Hours to be arranged.**RM 552. Problems of Recreation Supervision.** 3 hours.

The purpose of supervision; principles and techniques of supervision in a mod-

* No-grade course.

ern program of recreation; staff relationships; departmental organization; policies, regulations, problems. Rodney.

RM 553. **Administration of Recreation.** 3 hours winter.

Organization and administration of park and recreation programs in districts, communities, and municipalities; legal aspects, source of funds, types of programs. Rodney.

RM 554. **Problems of Camp Management.** 3 hours.

Analysis of problems under various types of camp sponsorship; principles, techniques, resources, administrative practices; principles and problems of leadership and group behavior. Rodney, Ford.

School of Journalism

JOHN L. HULTENG, M.S., Dean of the School of Journalism.

Professors: J. W. CRAWFORD, C. T. DUNCAN, J. L. HULTENG, W. F. G. THACHER (emeritus), G. S. TURNBULL (emeritus), R. M. WALES.

Associate Professors: B. L. FREEMESSER, R. C. HALL (emeritus), R. P. NELSON, C. C. WEBB.

Assistant Professors: J. D. EWAN, R. K. HALVERSON, G. C. JONES, J. B. LEMERT, K. T. METZLER, K. J. NESTVOLD, D. F. REA.

Lecturer: F. H. LOGGAN.

Assistants: K. D. JOHNSON, J. R. OCHS, R. L. ROBY, C. W. TUCK, D. S. WILIAMS.

A DEPARTMENT OF JOURNALISM was organized at the University of Oregon in 1912, and was raised to the rank of a professional school in 1916. The school is accredited by the American Council on Education in Journalism.

Admission. The major program in journalism is organized on an upper-division and graduate basis. During his freshman and sophomore years, a student planning to specialize in journalism pursues a preprofessional program which will insure a sound educational basis for professional study at the upper-division level.

Introduction to Journalism (J 224, 225, 226) is recommended for all prejournalism students. The following basic courses are open to sophomores: Mechanics of Publishing (J 321); Reporting I (J 361); Principles of Advertising (J 341); Copy Editing I (J 371).

Prejournalism students are advised: (1) to complete as many as possible of the courses in liberal arts which are required and recommended by the school; (2) to gain proficiency in the use of the typewriter; and (3) to participate in extracurricular journalistic activities.

Requirements for Bachelor's Degree. In its requirements for an undergraduate major, the School of Journalism places strong emphasis on courses which will provide a broad liberal education. Each student majoring in the School of Journalism is expected to complete the following year-long sequences in liberal arts courses (most of which may also be used to satisfy the University's general and group requirements):

- (1) One year of English composition (unless exempted by examination).
- (2) Two years of literature: English, American, or world literature (not a foreign-language literature course).
- (3) One year of history.
- (4) One year of economics and one year of political science; *or* one year of *either* economics or political science and one year sequence in one of the following: anthropology, geography, philosophy, psychology, or sociology.
- (5) Two additional year sequences in liberal arts courses.
- (6) At least *two* of the year-long sequences completed to satisfy 2, 3, 4, or 5 above must be at the upper-division level.

The professional requirements for a bachelor's degree with a major in journalism are as follows:

(1) *Introduction to Journalism* (J 224, 225, 226), recommended for all pre-journalism majors; students who do not take this sequence must later include in their programs the following courses: *Mechanics of Publishing* (J 321), *Principles of Advertising* (J 341), and *Reporting I* (J 361).

(2) A minimum of 33 term hours in upper-division professional courses (the total number of upper- and lower-division hours combined should be limited to 46 hours within the first 186 hours of an undergraduate program).

(3) At least two courses chosen from each of the following two groups: *Group A*—*Reporting I* (J 361); *Magazine Article Writing I* (J 468); *Advertising Copy Writing* (J 446); *Radio-Television News Writing I* (J 431); *Seminar: Public Relations Methods* (J 407). *Group B*—*Law of the Press* (J 485); *History of Journalism* (J 487); *Journalism and Public Opinion* (J 494).

(4) A minimum cumulative grade-point average of 2.25.

In consultation with his adviser, a journalism major selects professional courses which will provide a measure of concentration in a special field of journalism. The following concentration programs are recommended:

Advertising—*Principles of Advertising* (J 341); *Advertising Copy Writing* (J 446); *Advertising Layout* (J 447). Courses selected from the following: *Media of Advertising* (J 441, 442), *Advertising Production* (J 440), *Advertising Agencies and Departments* (J 445), *Advertising Problems* (J 444), *Photography* (J 335), *Reporting I* (J 361), *Mechanics of Publishing* (J 321).

News-Editorial—*Reporting I* (J 361); *Newspaper Editing* (J 371); *Reporting II* (J 462); *History of Journalism* (J 487); courses selected from the following: *Mechanics of Publishing* (J 321), *Law of the Press* (J 485), *Magazine Article Writing* (J 468, 469), *The Community Newspaper* (J 424), *Photography* (J 335).

Newspaper Management—*Mechanics of Publishing* (J 321); *Principles of Advertising* (J 341); *Reporting I* (J 361); *Newspaper Editing* (J 371); *The Community Newspaper* (J 424); *Newspaper Management* (J 421); courses selected from the following: *Reporting II* (J 462), *Photography* (J 335), *Law of the Press* (J 485), *Advertising Copy Writing* (J 446); *Advertising Layout* (J 447), *Advertising Production* (J 440).

Radio-Television Journalism—*Radio-Television News I and II* (J 431, 432); *Seminar: Radio-Television News Workshop* (J 407); *Seminar: Television Documentary News Film* (J 407); courses selected from the following: *Seminar: Radio-Television Station Management* (J 407); *Seminar: Radio-Television Problems* (J 407); *Reporting II* (J 462); *Media of Advertising* (J 442, *Radio-Television Advertising*); *Radio and Television Workshop* (Sp 341); *Radio and Television Script Writing* (Sp 347); *Radio-Television Direction* (Sp 344); *Radio-Television Production* (Sp 445); *Radio-Television Programming* (Sp 446).

Magazine Journalism—*Magazine Article Writing* (J 468, 469); *Magazine Editing* (J 470); courses selected from the following: *Mechanics of Publishing* (J 321), *Principles of Advertising* (J 341), *Newspaper Editing* (J 371), *Seminar: Industrial Editing* (J 407), *Advertising Copy Writing* (J 446), *Advertising Layout* (J 447), *Law of the Press* (J 485).

Public Relations—*Principles of Public Relations* (J 459); *Public Relations Problems* (J 483); courses selected from the following: *Mechanics of Publishing* (J 321), *Principles of Advertising* (J 341), *Reporting I* (J 361), *Seminar: Industrial Editing* (J 407), *Seminar: Documentary News Film* (J 407), *Seminar: Public Relations Methods* (J 407), *Advertising Production* (J 440), *Media of Advertising* (J 443), *Advertising Copy Writing* (J 446), *Advertising Layout* (J 447).

Visual Communication—Photography (J 335); Photojournalism (J 336); Seminar: Picture Editing (J 407); courses selected from the following: Seminar: Documentary Film in Television (J 407), History of Photography (J 407), Philosophy of Photography (J 407), Reporting I (J 361), Radio and Television Workshop (Sp 341, Sp 345), Principles of Advertising (J 341), Advertising Layout (J 447), Public Relations Problems (J 483), Magazine Editing (J 470), History of Journalism (J 487), Visual Communication Research (J 507).

Secondary-School Teaching of Journalism. For certification as a teacher of journalism in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

To meet the state standards in journalism and the requirements for recommendation by the University of Oregon, the student should complete the following program: undergraduate—Reporting I (J 361), Newspaper Editing (J 371), The Press and Society (J 450); fifth year—Reporting II (J 462); Methods in Teaching of Journalism (J 455); additional recommended preparation—Mechanics of Publishing (J 321), Photography (J 335), Principles of Advertising (J 341).

For further information, the student should consult a member of the journalism faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Graduate Study. The School of Journalism offers work leading to the Master of Arts or Master of Science degree. Programs are provided for candidates with considerable journalistic experience and for those with little experience, under the following plans:

Plan A. Thesis required. Designed for students with an extensive background in journalism. The candidate may, on request, be permitted to satisfy the major requirement with less than the normal 30 term hours of work in journalism.

Plan B. Thesis optional. Designed for students with little or no journalistic background. The candidate may take a maximum of 40 term hours of work in journalism. If he elects not to write a thesis, he must submit three term papers, written for graduate courses. Plan B students are required to enroll for several basic professional courses that do not carry graduate credit, in addition to completing the 45 hours of graduate credit required for the master's degree.

Facilities. The School of Journalism is housed in Eric W. Allen Hall, a three-story brick structure erected in 1954 and named in memory of the late Eric W. Allen, the first dean of the School of Journalism. Fully equipped laboratories are provided for newswriting, editing, advertising, radio-television news, photography, and typography. Current files of newspaper and trade publications are maintained in the Journalism Reading Room; the University Library has an excellent collection of the literature of mass communications. The School of Journalism receives the regular newspaper teletypewriter monitor services of the Associated Press. Offices of the OREGON DAILY EMERALD, the University student newspaper, are located on the third floor of Allen Hall. The Eric W. Allen Seminar Room, furnished by contributions from friends and alumni of the school, is a center for meetings of journalism seminars and student groups.

The Oregon Newspaper Publishers Association and the Oregon Association of Broadcasters have their offices in Allen Hall. The school and these associations cooperate in providing placement services for journalism graduates. The Oregon Scholastic Press also has its headquarters in Allen Hall.

The interest from a \$15,000 endowment fund, bequeathed to the University by the late Mrs. C. S. Jackson, widow of the founder of the *Oregon Journal*, provides no-interest loans to men students majoring in journalism.

The Arthur and Marian Rudd Loan Fund, established by a gift to the School from an alumnus, provides no-interest loans to men or women students majoring in journalism.

A fund established by Zeta chapter of Gamma Alpha Chi, professional society for women in advertising, provides loans for women students majoring in journalism. A fund established and administered by the Oregon Press Women provides loans for senior women majoring in journalism.

LOWER-DIVISION COURSE

J 224, 225, 226. **Introduction to Journalism.** 2 hours each term.

Recommended for prejournalism majors; open to nonmajors. Survey and criticism of communication media; discussion of journalistic techniques. Fall term: news and editorial functions. Winter term: advertising and public relations. Spring term: production methods. The terms need not be taken in sequence. Nelson, staff.

UPPER-DIVISION COURSES

J 321. **Mechanics of Publishing.** 3 hours.

Printing processes and machinery, including their history; recognition of type faces, typographical display, copy fitting; typesetting machines, stereotyping, letterpress, offset, rotogravure, engraving; paper and ink; relationship of mechanical to business and editorial departments. Lectures and laboratory. Webb.

J 335. **Photography.** 3 hours.

Study of principles of photography, emphasizing processing and printing of pictures. Consideration given to photographic criticism and communicative aspects of photography. Lectures and laboratory. Freemesser.

J 336. **Photojournalism.** 3 hours.

Study of the documentary and informational aspects of photojournalism. Creation and editing of a photographic essay; use of color in photography; trends in pictorial journalism. Prerequisite: J 335 or consent of instructor. Freemesser.

J 341. **Principles of Advertising.** 3 hours.

Advertising as a factor in the distributive process; the advertising agency; the "campaign"; the function of research and testing; the selection of media: newspaper, magazine, broadcasting, outdoor advertising, direct mail. Ewan, Wales.

Sp 341. **Radio and Television Workshop.** 2 hours.

For description, see SPEECH.

Sp 347. **Radio and Television Script Writing.** 2 hours.

For description, see SPEECH.

J 361. **Reporting I.** 4 hours.

Basic training in news writing and reporting; coverage of city and county affairs; reporting of special news. Lectures, individual conferences, laboratory. Hulteng, Rea.

J 371. **Newspaper Editing.** 4 hours.

Instruction and practice in copy editing and headline writing for the newspaper; emphasis on grammar and style. Instruction and practice in problems involved in evaluation, display, make-up and processing of written and pictorial news matter under time pressure. Lectures and laboratory. Prerequisite: J 361. Halverson, Rea.

J 401. **Research.** Hours to be arranged.

J 403. **Thesis.** Hours to be arranged.

J 405. **Reading and Conference.** Hours to be arranged.

*J 425. **Advanced Practice.** 1 to 3 hours.

Field experience in news and advertising practice. Prerequisite: consent of instructor.

J 431. **Radio-Television News I.** 3 hours.

Gathering and writing news for broadcast media. Emphasis on broadcast style, basic aspects of radio-television news writing, and radio news operation. Lectures, individual conferences, and laboratory. Nestvold.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

J 407. **Seminar.** (G) Hours to be arranged.

Editorial Cartooning.
Industrial Communications and Editing.
Documentary Film in Television.
Picture Editing.
Radio-TV Station Management.
Radio-TV Problems.
History of Photography.
Philosophy of Photography.

J 421. **Newspaper Management.** (G) 3 hours.

Management problems of the newspaper; plant and equipment; personnel; administration and coordination of editorial, advertising, and mechanical departments; business office operations. Webb.

J 424. **The Community Newspaper.** (G) 3 hours.

The weekly, semiweekly, and small daily newspaper in America; historical development and social role, past and present; problems of news and editorial policy peculiar to this distinctive form of journalism. Webb.

J 432. **Radio-Television News II.** (G) 3 hours.

Advanced aspects of the preparation, reporting, and broadcasting of radio-television news. Emphasis on television news writing and reporting, the broadcast documentary, and radio-television news interviewing. Lectures and laboratory. Prerequisite: J 361 or J 431. Nestvold.

J 440. **Advertising Production.** (G) 3 hours.

Instruction in the technical aspects of advertising. Printing and engraving, lithography, rotogravure, silk-screen process, paper, ink, and color. Production planning of advertising materials. Lectures and laboratory. Prerequisite: J 321, J 341. Webb.

J 441. **Media of Advertising: Print.** (G) 3 hours.

Examination and evaluation of newspapers, magazines, outdoor, direct mail, and point-of-purchase displays as media for advertising; includes media buying procedures and philosophy, media research, media planning, and agency media department organization. Ewan, Wales.

J 442. **Media of Advertising: Broadcast.** (G) 3 hours.

Examination and evaluation of television and radio as media for advertising; includes network relations, program and audience measurements, network and spot buying procedures, media planning, N.A.B. Code and F.C.C. regulations. Nestvold.

J 444. **Advertising Problems.** (G) 3 hours.

The student is given an opportunity to cultivate his judgment through consideration of actual marketing and merchandising problems, in the solution of which advertising may be a factor. Prerequisite: J 341. Wales.

Sp 444. **Radio-Television Direction.** (G) 3 hours.

For description, see SPEECH.

* No-grad course.

- Sp 445. Radio-Television Production.** (G) 3 hours.
For description, see **SPEECH**.
- Sp 446. Radio-Television Programming.** (G) 3 hours.
For description, see **SPEECH**.
- 445. Advertising Agencies and Departments.** (G) 3 hours.
The role of the advertising agency in the creation of advertising materials, marketing plans, and research; structure and function of the agency; client relations; merchandising; personnel; financial operations; legal problems. The company advertising department. Wales.
- 446. Advertising Copy Writing.** (G) 3 hours.
Theory and practice in writing advertising copy. Study of style and structure, with emphasis on persuasive writing. Lectures and laboratory. Prerequisite: J 341. Ewan, Wales.
- 447. Advertising Layout.** (G) 3 hours.
Instruction and practice in graphic design for advertising. Work with type and illustrations. Consideration given to all media. Prerequisite: J 341. Ewan, Nelson.
- 450. The Press and Society.** (g) 3 hours.
The organization and operation of American newspapers, leading national magazines, and the media of commercial broadcasting; evaluation of their functions, duties, and responsibilities in contemporary society. Not open to journalism majors. Nelson.
- 455. Methods of Teaching Journalism.** (G) 2-3 hours.
The teacher's role in guiding student publications in secondary schools; methods of teaching of journalism. Rea.
- 459. Principles of Public Relations.** (G) 3 hours.
Theory and practice of public relations as viewed by business, government, and civic organizations; study of mass media as publicity channels; role of the public relations practitioner; public relations departments and agencies. Ewan, Nelson.
- 462. Reporting II.** (G) 4 hours.
Newspaper reporting of legislative and executive governmental bodies; political news and other special news areas; civil and criminal courts and appellate procedure. Prerequisite: J 361. Halverson.
- 468. Magazine Article Writing I.** (G) 3 hours.
Writing newspaper and magazine feature articles; book and movie reviewing for the mass media; study of the problems of marketing magazine and book manuscripts. Metzler, Nelson.
- 469. Magazine Article Writing II.** (G) 2 hours.
Writing and marketing magazine articles. Individual conferences. Prerequisite: J 468. Nelson.
- 470. Magazine Editing.** (G) 3 hours.
Principles and problems of magazine editing; content selection, use of pictures, headline writing, caption writing, layout, make-up, typography; editorial responsibility. Lectures and laboratory. Metzler, Nelson.
- 483. Public Relations Problems.** (G) 3 hours.
Use of research, decision processes, and program design in the solution of public relations problems. Application of principles and techniques in the public relations programs of profit and nonprofit institutions. Role of the mass media of communication in such programs. Ethics of public relations. Prerequisite: J 459. Ewan, Nelson, Wales.
- 485. Law of the Press.** (G) 3 hours.
The constitutional guarantee of freedom of the press; principal Supreme Court decisions; legal status of the press as a private business and as a public utility; governmental activity toward improving the press; legal controls of

publication; libel, right of privacy, copyright, contempt of court, censorship and radio news regulation. Rea.

J 487. History of Journalism. (G) 3 hours.

Study of the changing character of the newspaper, with emphasis on the contributions of outstanding editors, publishers, and inventors. The evolution of freedom of the press, editorial and business standards, mechanics, and advertising practices. Halverson.

J 494. Journalism and Public Opinion. (G) 3 hours.

The formation, reinforcement, and change of opinions. The role of major social and political institutions, with emphasis upon the mass media of communication. Lemert.

J 495, 496. Journalism and Contemporary Affairs. (G) 2 hours each term.

Examination of current problems in journalism; evaluation of governmental and other public policies affecting the mass media; trends in mass communication. Duncan, Hulteng.

GRADUATE COURSES

***J 501. Research in Journalism.** Hours to be arranged.

***J 503. Thesis.** Hours to be arranged.

J 505. Reading and Conference. Hours to be arranged.

J 507. Seminar. Hours to be arranged.

Public Opinion Measurement.

Advertising Research.

Literature of Journalism.

History of Journalism.

Law of the Press.

Propaganda.

The Photo Essay.

Visual Communication Research.

Writing the Nonfiction Book.

J 512. Communication Research Methods. 3 hours.

Selection of research problems; planning the study; field research methods; experimental research methods; content analysis; readability measurement. Lemert.

J 513. Theories of Mass Communication. 3 hours.

The communication process; communication perception and attention; audiences of the mass media; mass communication and attitude change. Lemert.

J 564. Editorial Writing. 3 hours.

Analysis and interpretation of news for media of mass communication; editorial policy formulation; editorial page operation. Hulteng.

J 589. Comparative Foreign Journalism. 3 hours.

History of and contemporary structure of international communications facilities: the flow of worldwide news; conflicting theories of press control, foreign correspondence, international censorship, major world newspapers and broadcasting systems, and historical and contemporary leaders of the world press.

* No-grade course.

School of Law

EUGENE F. SCOLES, J.D., LL.M., J.S.D., Dean of the School of Law.

CHAPIN D. CLARK, LL.B., LL.M., Acting Dean of the School of Law.

THOMAS W. MAPP, B.A., LL.B., Acting Associate Dean of the School of Law.

LOIS I. BAKER, M.A., Law Librarian.

JAMES H. GRITTON, B.C.S., M.A., J.D., Assistant Law Librarian.

Professors: W. M. BASYE, C. D. CLARK, O. J. HOLLIS, C. G. HOWARD (emeritus),
F. R. LACY,[†] H. A. LINDE,[†]

Associate Professors: D. W. BRODIE, T. W. MAPP, G. M. PLATT, A. P. RUBIN,
R. S. SUMMERS, H. W. TITUS.

Assistant Professors: J. G. HUNTER, D. R. VETRI, G. D. WEATHERFORD.

Special Lecturer: E. C. HARMS.

THE UNIVERSITY OF OREGON SCHOOL OF LAW, established in 1884 as a night law school in the city of Portland, was moved to the Eugene campus in 1915 and reorganized as a regular division of the University. The School of Law was admitted to the Association of American Law Schools in December 1919; the standards of the school were approved by the American Bar Association in August 1923.

Facilities. The School of Law is housed in Fenton Hall, a three-story brick structure, with a fireproof annex in which the main book collection of the Law Library is located. Fenton Hall, named in honor of the late William David Fenton, Oregon attorney and benefactor of the school, was formerly the University Library. The building was extensively remodeled in 1938 to provide a permanent home for the School of Law. A new Law Library reading room with modern facilities was provided in 1953.

The holdings of the Law Library exceed 66,000 volumes, including complete case reports of the National Reporter System, complete state reports from colonial times to the establishment of the Reporter System, a substantial collection of English and Canadian case law, codes and compilations of state and Federal state law, standard legal digests and encyclopaedias, etc. Its periodical collection includes files of about 335 legal journals. An excellent collection of publications relating to Oregon territorial and state law includes an extensive file of Oregon Supreme Court briefs.

The Law Library reading rooms are adjacent to the stacks, allowing students direct and easy access to the book collections.

Admission to the School of Law. As a general rule a baccalaureate degree is required for admission to the School of Law. In exceptional cases applicants who have completed a minimum of three-fourths of the work acceptable for a baccalaureate degree, and whose background and academic record clearly demonstrate outstanding potential for legal studies, may be admitted without a baccalaureate degree at the discretion of the School of Law. The foregoing minimum requirement may include no work taken by correspondence and no more than ten per cent in elective courses in military science, hygiene, domestic arts, physical education, vocal or instrumental music, or other subjects of a nontheoretical nature. As a further exception, students who began their prelegal studies at the University of Oregon prior to 1967-68 may be admitted, without reference to "outstanding poten-

* Appointment effective July 1, 1968.

† On sabbatical leave 1967-68.

tial for legal studies," and with the minimum requirement of three-fourths of the work acceptable for a baccalaureate degree, on the same basis as students holding a baccalaureate degree.

The applicant's entire background, including his academic achievement, employment experience, and extracurricular activities is considered in connection with his application.

Application. Two applications are required: one for the University and one for the School of Law. Both should be prepared accurately and completely, and forwarded to the Admissions Committee, School of Law, University of Oregon, Eugene, Oregon 97403.

The Admissions Committee acts on applications in the order completed, beginning January 1 preceding the fall term for which admission is sought.

Transcripts. Applicants must furnish the Admissions Committee, School of Law, with an official transcript from each undergraduate, graduate, and professional school attended, showing all academic work completed at the date of application.

The Admissions Committee will act on an application if the applicant has completed the following minimum amount of academic work:

1. Applicants intending to enter the School of Law with a baccalaureate degree, seven semesters or ten terms.
2. Applicants intending to enter the School of Law with three-fourths of the work acceptable for a baccalaureate degree, five semesters or seven terms.

If the applicant is enrolled in an undergraduate, graduate, or professional school at the time of application, favorable Admissions Committee action will be in the form of a tentative admission. Formal admission cannot be given until a final or supplemental transcript is furnished to the Admissions Committee showing work completed to the end of the last academic session prior to enrollment in the School of Law and showing, where appropriate, receipt of a baccalaureate degree.

Fee. Applications must be accompanied by a check for \$10.00 payable to the University of Oregon unless the applicant has previously been registered at the University of Oregon. This fee is neither refundable nor credited toward tuition and fees, regardless of action taken on the application.

Law School Admission Test. Applicants must take the uniform Law School Admission Test administered by the Educational Testing Service and have a report of the test score sent to the School of Law. Inquiries concerning the dates, places, and fee for the Law School Admission Test should be sent directly to the Educational Testing Service, Box 944, Princeton, New Jersey 04540.

Transfer law students. If the applicant has ever attended another law school a letter from the dean of that school stating that the applicant is in good standing and eligible to return to that school without condition must be sent to the Admissions Committee.

Time of enrollment. Students may begin studies in the School of Law only at the beginning of the fall term of each academic year.

Prelegal Program. The School of Law does not prescribe any particular form of prelegal education. Intellectual maturity and breadth of educational background are considered more important than particular subject matter. The School of Law does emphasize the importance of well developed writing skills.

Registration and Fees. Law students register and pay their fees at the time set in the University calendar for registration. Law students pay the regular fee prescribed for all students. Nonresident law students who hold a bachelor's degree from an accredited college or university are classified as graduate students and pay the same fees as resident law students.

Curriculum and Degrees. The School of Law offers a standard professional curriculum leading to the Doctor of Jurisprudence degree. A total of three years of resident professional study in the University of Oregon or another law school of recognized standing is required for a law degree, of which, normally, the two last years must be in residence at the University of Oregon. The curriculum is arranged, as far as possible, to present the fundamental topics of the law during the first year, and the more specialized subjects during the second and third years.

The curriculum of the School of Law provides a thorough preparation for the practice of law in any state. While the student is required to take a basic core of courses to establish a foundation in the fundamental principles of the major branches of the law, an extensive program of elective courses is offered to permit study in areas of special interest. The School of Law seeks to have the student acquire knowledge not only of legal doctrine, but also of the judicial process and of the social, economic, and political problems with which lawyers must deal. The method of instruction requires an intensive exercise of analytical skills.

In the list of courses on pages 368-369, elective courses are indicated under a separate heading. All other courses are required. The school reserves the right to make any desirable or necessary changes in courses as listed and described.

A student admitted without a baccalaureate degree must obtain that degree before entering upon his second year of study in the School of Law. Law students may qualify for a nonprofessional baccalaureate degree after the satisfactory completion of one year of professional work in the School of Law, provided that they have satisfied all general University requirements for such a degree. For a non-professional degree, the major requirement in law is 36 term hours (unweighted) in professional courses. The dean of the School of Law will not recommend a student for the B.A. or B.S. degree with a major in law who has been awarded, or is a candidate for, either of these degrees with a major in another field.

Because substantial participation in classroom discussion is an essential factor in legal education, regular class attendance is required of students in the School of Law. Credit for any course may be denied for irregular attendance. Classes are regularly scheduled Monday through Saturday.

Students who have met the requirements for admission to the School of Law, and who have successfully completed courses in law aggregating 123 hours and have otherwise satisfied the requirements of the University and the School of Law, will be granted the degree of Doctor of Jurisprudence (J.D.), provided that they:

- (1) Obtain (at least two years before completing work for the law degree) the Bachelor of Arts, Bachelor of Science, or an equivalent degree from this University or some other institution of recognized collegiate rank.

- (2) Earn a minimum grade-point average of 2.00 in the School of Law.

- (3) Comply with such other requirements as the law faculty may from time to time impose.

Transferred Credit. A student as a general rule may transfer not to exceed one year of credit earned in another law school of recognized standing, provided that, at the time he was admitted to the law school from which he wishes to transfer credit, he could have met the then-existing admission requirements of the University of Oregon School of Law. In exceptional cases only, a student may be permitted to transfer not to exceed two years of credit. The right to reject any and all such credit is reserved.

Application for admission by a student who has attended another law school will not be considered unless: (1) the school from which transfer is sought is on the list of schools approved by the American Bar Association and is a member of the Association of American Law Schools; (2) the student is eligible for re-earn in good standing to the school previously attended; and (3) the student's cumulative grade-point average for all professional law courses completed is at least 2.00, when computed on the basis of the system of grade-point-average

determination used by the University of Oregon. Transferred credit will be accepted, however, only if the student's professional law-school record is of high quality.

In determining whether a student who has transferred credit from another law school has satisfied the 2.00 grade-point-average requirement for the J.D. degree, only grades earned at the University of Oregon will be considered.

Oregon Law Review. The OREGON LAW REVIEW is published quarterly under the editorship of a student editorial staff, with the advice of a faculty editor, as a service to the members of the Oregon bar and as a stimulus to legal research and productive scholarship on the part of students. The LAW REVIEW has been published continuously since 1921.

Legal Aid. Members of the third-year law class each year have the opportunity to participate on a voluntary, noncredit basis in the legal-aid program operated by the Lane County Bar Association.

Oral Case Analysis Contest. Law students entering the Lane County Bar Association Oral Case Analysis Contest are afforded the unique opportunity of discussing a recent case or legal topic of interest with an audience composed entirely of lawyers. Any registered law student may enter the contest. The Lane County Bar Association offers each year cash prizes of \$65, \$40, and \$25 to the three students judged to have made the best presentations at the weekly luncheon meetings of the bar association.

Order of the Coif. The Order of the Coif, national law-school honor society, maintains a chapter in the University of Oregon School of Law. The Order of the Coif was founded to encourage high scholarship and to advance the ethical standards of the legal profession. Members are selected by the faculty during the spring term each year from the ten per cent of the third-year class who rank highest in scholarship. Character, as well as scholarship, is considered in selecting members.

Placement. The School of Law maintains its own placement service for its graduates, under the direction of the associate dean of the school. Individual attention is given to the wishes of each graduate concerning his placement.

UPPER-DIVISION SERVICE COURSE

L 430. **Law, Its Processes and Functions.** (g) 3 hours.

Introduction to the legal system for nonlaw students. Law presented not as a body of rules but as man's chief means of political and social control; judicial opinions and other primary source materials used to show how the legal system operates and what its main social functions are. Not open to lower-division students.

FIRST-YEAR COURSES

L 411, 412, 413. **Contracts.** 3 hours each term.

Formation of simple contracts; consideration and other formalities; performance and breach; discharge; remedies, including specific performance; third party beneficiaries; assignments; problems of agency; illegality.

L 414, 415, 416. **Property.** 3 hours each term.

Possession as a concept in acquisition, retention, transfer, and loss of chattels. Requisites of valid acquisition and transfer of nonderivative and derivative titles to land; descriptions; covenants of title; fixtures. Landowners' incorporeal interests; easements; licenses, covenants. Creation and characteristic of common-law estates. Classification and protection of nonpossessory future interests. Class gifts; construction problems; rule against perpetuities; power of appointment; restraints on alienation.

L 417, 418, 419. **Legal Bibliography, Writing, and Oral Advocacy.** 1 hour each term.

Legal reference materials: training in use of legislative and administrative materials, judicial precedents, text books and periodicals. Preparation of original legal research papers. Participation in appellate moot court program.

L 420, 421. **Civil Procedure.** 3 hours each term, fall and winter.

Introductory study of procedure in civil litigation. The origin and development of the English court system; the dual system of state and federal courts in the United States; organization and operation of courts; judicial power; jurisdiction at law and in equity; common-law forms of action; methods of trial at law and in equity; nature of judgments and decrees; jurisdiction of federal courts; origin and development of common-law and equity pleading, code pleading, and the Federal Rules of Civil Procedure.

L 422, 423, 424. **Torts.** 3 hours each term.

Liability for intentionally and negligently caused injuries to person and property; the impact of insurance and risk-bearing upon liability for such injuries; vicarious liability; liability without legal fault; products liability; defamation; misrepresentation; business torts; limitations on liability; remedies: damages, injunction, and compensation plans.

L 425, 426, 427. **Criminal Law and Procedure.** 2 hours each term.

Source and function of criminal law; elements of specific crimes and factors limiting culpability; criminal law and its administration as a technique of social order; procedure in criminal cases; equity and criminal law; protection of individual rights by constitutional and other legal limitations on criminal law enforcement.

L 428. **Legislative and Administrative Processes.** 3 hours spring.

Introduction to the nature of and distinctions between development and application of law; interrelationship of legislative, executive and judicial powers; concept of delegation of authority; legislative and administrative processes in adjudicated cases as opposed to managerial execution of governmental policy.

SECOND-YEAR COURSES

L 434. **Secured Land Transactions.** 4 hours.

Vendor-purchaser and mortgage law; emphasis on functional comparison of land sale contracts, mortgages, and deeds of trust as real property security devices in the market place.

L 435. **Commercial Transactions.** 4 hours fall.

Secured transactions, sales, documents of title, and introduction to commercial paper under the Uniform Commercial Code.

L 447, 448. **Partnerships and Corporations.** 4 hours fall, 3 hours winter.

A comparative study of partnerships, corporations, and other business associations in launching the enterprise and in transactions prior to formation; management, control, and transfer of control in a going concern; managers' benefits and hazards; asset distributions to members; reorganization of a solvent enterprise; solvent dissolution.

L 449, 450. **Constitutional Law.** 3 hours each term, fall and winter.

The Federal system under the Constitution of the United States; judicial review in constitutional cases; national and state control over the economy under the commerce clause; the power to tax and spend and other powers of Congress; national power in international relations; guarantees of individual liberty by limitations on governmental power; constitutional issues in state courts.

L 453. **Code Pleading.** 4 hours spring.

Pleading under the codes and the Federal rules of civil procedure; parties; joinder of causes; the pleadings; objections to pleadings; amendments.

L 454, 455. **Trusts and Estates.** 3 hours winter, 4 hours spring.

First term: execution and construction of testamentary and trust instruments;

resulting and constructive trusts. Second term: administration of decedents' and fiduciary estates; law of intestate succession.

THIRD-YEAR COURSES

- L 458, 459. **Conflict of Laws.** 3 hours each term, fall and winter.

Theoretical basis of decision; jurisdiction; foreign judgments; right under foreign law in torts, contracts, sales, security transactions, business organizations, family law.

- L 460, 461. **Trial Practice.** 3 hours each term, winter and spring.

Jurisdiction; venue; process; judgments; juries; introduction of evidence; exceptions; findings; verdicts; motions after verdict. Moot court jury trial spring term.

- L 462. **Creditors' Rights.** 4 hours.

Remedies of and priorities between unsecured creditors; exemptions, fraudulent conveyances; general assignments and creditors' agreements; bankruptcy.

- L 477. **The Legal Profession.** 2 hours.

Organization of bench and bar; functions of the legal profession in the administration of justice; canons and other standards of professional ethics.

- L 478, 479. **Evidence.** 3 hours each term, fall and winter.

Presumptions; burden of proof; judicial notice; hearsay, opinion, and character evidence; admissions; real evidence; best-evidence rule; parole-evidence rule; witnesses.

- L 482, 483. **Federal Taxation.** 3 hours each term, fall and winter.

What is income and whose income is it under the Federal income tax; deductions and credits; when is it income or deductible—accounting problems; capital gains and losses; income-tax problems in corporate distributions and reorganization; the Federal estate tax—concepts of gross estate, valuation, deductions, credits, and computation of tax; the Federal gift tax; collection of Federal taxes, transferee liability, and criminal penalties.

- L 488. **Legal Writing.** 1 hour.

Preparation, under the supervision of a member of the faculty, of a manuscript in the form of a "Note and Comment" suitable for submission to the Board of Editors of the OREGON LAW REVIEW.

ELECTIVE COURSES

- L 436. **Commercial Paper.** 3 hours.

Analysis of rights and liabilities of parties to negotiable instruments under the Uniform Commercial Code. Some comparisons with foreign law will be made.

- L 440. **Insurance.** 3 hours.

The insurance business; insurable interest; coverage of contract as to event and insured; subrogation; warranties, representations, and concealment.

- L 441. **Land and Water Resources.** 3 hours.

The legal aspects of problems arising in land, timber, minerals, and water utilization, with special attention to the effect of Federal, state, and local legislation on such problems.

- L 444. **Restitution.** 3 hours.

Historical background; availability and operation of quasi contracts and other remedies for unjust enrichment; restitution of benefits tortiously acquired or conferred upon unenforceable contracts or because of mistake or duress.

- L 446. **Family Law.** 3 hours.

Nature of marriage; annulment; divorce; adoption; legal incidents of status of husband and wife and parent and child.

L 471. Legislation. 3 hours.

The legislative process; the lawyer's role in policy formulation and law making in contrast to litigation; drafting; presentations before legislative committees and other law-making bodies; lobbying and its regulation; legislative history and the interpretation of statutes.

L 476. Labor Law. 3 hours.

The law of labor-management relations; common-law background and modern development; Federal and state regulation of collective bargaining, strikes, and picketing, and of specific employment conditions and practices; the N.L.R.B. and other agencies of labor-law administration.

L 481. Trade Regulation. 4 hours.

Survey of the effect of the major Federal legislation (Sherman, Clayton, Robinson-Patman, Federal Trade Commission Acts) in the anti-trust and unfair-competition areas.

L 484. Administrative Law. 4 hours.

The administrative process; delegation of administrative functions and legislative and executive control of agency action; formulation and enforcement of the administrative program; procedural standards of administrative action; the nature and scope of judicial review.

L 485. Future Interests and Estate Planning. 4 hours.

Recognition and solution of practical problems in lifetime and testamentary disposition of property; development of the law of future interests within the overall framework of estate planning. Individual student assignment of a practical problem in preparing a family estate plan, including the drafting of necessary legal instruments.

L 486. Securities Regulation. 3 hours.

Analysis of Federal legislation administered by the Securities and Exchange Commission and of state legislation, popularly designated as "blue sky laws," based on the policy of investor protection.

L 487. Local Government Law. 3 hours.

The nature, constitution, powers, and liabilities of municipal corporations.

L 501. Research. Hours to be arranged.

Open to third-year students, by special arrangement only. The student works under the supervision of the instructor in whose field the problem is selected. Not more than 3 hours per term or a total of 9 term hours of credit may be earned.

L 503. Thesis. Hours to be arranged.

A maximum total of 3 hours of credit may be earned.

L 507. Seminar. Hours to be arranged.

Seminars offered in the following subjects as student interest and other conditions may make the instruction feasible:

Administration of Criminal Justice.

Admiralty.

Compensation for Personal Injuries.

Copyright, Trade Mark, and Patent Law.

Current Constitutional Problems.

International Business Transactions.

International Law.

Jurisprudence.

Land Use Planning.

Legal Problems of Business Planning.

Preparation and Editing of Legal Manuscripts.

Social Legislation.

School of Librarianship

LEROY C. MERRITT, Ph.D., Dean of the School of Librarianship.

Professors: ELIZABETH FINDLY, C. W. HINTZ, L. C. MERRITT, P. D. MORRISON.

Associate Professors: HOLWAY JONES, R. R. MCCOLLOUGH, IONE PIERRON.

Assistant Professors: J. P. CAMAROMI, CAROLINE FELLER, R. E. KEMPER, PATRICIA B. POND.

THE UNIVERSITY OF OREGON School of Librarianship was established in the fall of 1966. The University offered undergraduate courses for school librarians in summer sessions as early as 1920; a regular-session program was established in the Department of English in 1934. In 1948 the program was transferred to the School of Education. In 1960 the University was authorized to offer graduate work in librarianship leading to the Master of Arts or Master of Science degrees. Professional instruction in the School of Librarianship is offered at the graduate level, and leads to the professional degree of Master of Library Science.

The offices, classrooms, and laboratories of the school are located in the University Library building; the facilities and resources of the Library itself provide the basic laboratory for students in the school.

The program of the School of Librarianship is designed to provide: (1) graduate instruction in the basic principles and practices of library service and administration; (2) opportunities for in-service training; (3) leadership in the development of new and improved concepts and practices in librarianship; (4) education for school librarianship.

Admission. Requirements for admission to the professional graduate program of the school include: (1) graduation from an institution of higher education whose requirements for the bachelor's degree are substantially equivalent to the requirements of the University of Oregon; (2) a grade-point average of 3.00 for the last two years of the student's academic preparation; (3) a satisfactory score on the Graduate Record Examination Aptitude Test or on the Miller Analogies Test; (4) two years of college-level study of one modern foreign language, or one year of college-level study of each of two modern foreign languages; (5) for foreign students, proof of proficiency in the English language as measured by the University of Michigan English Language Institute Test or the Princeton University Test of English as a Foreign Language, in lieu of the Aptitude Test or the Miller Analogies Test.

For application procedures for admission to graduate standing in the University, see page 115. Students applying for admission to the School of Librarianship must also: (1) have three letters of recommendation (one preferably from a librarian) sent to the dean of the School of Librarianship; (2) arrange for an interview with the dean or member of the faculty of the school or with a representative of the school designated by the dean. All application procedures must be completed early in the term preceding the term in which the student wishes to enter the school.

Degree Requirements. The requirements for the M.L.S. degree are as follows: (1) 45 term hours of graduate work, including not less than 39 hours in librarianship and at least two graduate courses in another school or department totaling not less than 4 term hours; (2) completion of a 24-hour core curriculum, including Lib 411, Lib 421, Lib 431, Lib 442, Lib 512, Lib 522, Lib 571, Lib 572;

(3) a 3.00 GPA covering all upper-division and graduate courses taken after admission to the school.

A maximum of 15 term hours of graduate work completed at another accredited institution or through the Division of Continuing Education of the Oregon State System of Higher Education may be accepted for transferred credit. Candidates who hold advanced degrees in another field may be considered to have satisfied the requirement for work outside the school, and may take additional courses in librarianship.

Certification Requirements for School Librarians. For certification as a school librarian in Oregon schools, the Oregon State Department of Education requires the following:

Basic Certificate. To qualify for a three-year basic certificate with a norm in library science, the applicant must: (1) hold or be eligible for a valid basic teaching certificate; (2) have completed a planned program for the preparation of librarians in a standard teacher-education institution with an approved program in library science, including 18 term hours in cataloging and classification, reference, selection, and library administration. These courses may be chosen from Lib 411, Lib 421, Lib 431, Lib 432, Lib 442, Lib 445 or Ed 435, Lib 451.

Standard Teaching Certificate. To qualify for a standard teaching certificate for librarians, the applicant must have completed a planned five-year program in a standard teacher-education institution, including the standard 30-hour norm in library science, which must include 12 term hours in addition to the 18 term hours required for the basic certificate. The additional 12 hours usually include Lib 512 and Lib 522, and two courses chosen from Lib 561, Lib 562, and Lib 563.

Special Requirement. All courses in librarianship taken to satisfy the basic norm must be completed within five years. Courses taken to satisfy the standard norm must be completed within an additional six years. Grades below C and credit earned in ungraded courses are not acceptable. No credit is given for correspondence courses. At least half of the credits for either norm must be earned in residence at the University of Oregon.

LOWER-DIVISION SERVICE COURSE

Lib 127. **Use of the Library.** 1 hour any term.

Training in the use of the card catalog, periodical indexes, and reference books; experience in the preparation of bibliographies. As far as possible, problems are coordinated with the individual student's study program. Findly.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Lib 411. **Cataloging and Classification.** (G) 3 hours.

Introduction to meaning, purpose, and value of cataloging and classification; technical literature and reference aids for cataloging and classification; development of judgment and decisions necessary for adapting rules and methods to meet problems in different types of libraries. Camaromi, Kemper.

Lib 421. **Bibliography and Reference.** (G) 3 hours.

Introduction to reference services; evaluation and use of reference materials; correct bibliographical form; practical problems in the use of reference books in schools and other small libraries. Findly, Morrison.

Lib 431. **The Library in Society.** (G) 3 hours.

The development of American libraries; their present-day functions as educational and cultural institutions; legal structure; interlibrary cooperation; relations with the mass media; librarianship as a profession. Pierron.

Lib 432. **The School Library.** (G) 3 hours.

Introduction to school librarianship and to methods of organization and maintenance of effective materials-centered libraries in elementary and sec-

ondary schools. Prerequisite, or taken concurrently: Lib 411, Lib. 431, Lib 442. Pond.

Lib 442. Selection and Acquisition of Materials. (G) 3 hours.

Reviewing media, selection aids, and other means of evaluating and selecting books and other materials in the light of library objectives. Merritt, Pierron.

Lib 445. The Library and Audio-Visual Materials. (G) 3 hours.

Evaluation and use of audio-visual resources and consideration of uses of all forms of nonprint communications media in library programs for all types of libraries. Kemper.

Lib 451. Children's Literature. (G) 3 hours.

Survey of children's literature, with emphasis on selection and evaluation of books suitable for public and school libraries; reading guidance in relation to both personal and curricular needs. Feller, Pond.

GRADUATE COURSES

Lib 505. Reading and Conference. Hours to be arranged.

Lib 507. Seminar. Hours to be arranged.

Lib 509. Practicum. 3-5 hours.

Supervised practical experience under the guidance of a professional librarian.

Lib 512. Advanced Cataloging and Classification. 3 hours.

More-difficult problems in the cataloging and classification of books and other library materials; survey of theories and experiments in cataloging and classification, and of their implications for the future. Prerequisite: Lib 411. Camaromi.

Lib 522. Advanced Bibliography and Reference. 3 hours.

Reference books in the various subject fields; theory and history of bibliography; interlibrary loan. Prerequisite: Lib 421. Morrison.

Lib 523. Government Publications. 3 hours.

The acquisition, organization, and use of government publications of the United States, selected foreign countries, and international organizations, with special attention to United States government documents. Prerequisite: Lib 421. Morrison.

Lib 533. The Public Library. 3 hours.

Administrative and service problems of public libraries, including collection building and maintenance, staffing, public relations with clientele and governing authority. Prerequisite: Lib 431. Merritt.

Lib 534. The Academic Library. 3 hours.

Administrative and service problems of college, university, and research libraries, including collection building and maintenance, staffing, public relations with clientele and supporting institution. Prerequisite: Lib 431. Morrison.

Lib 538. Library Administration. 3 hours.

Processes of administration as applied to the government, organization, staffing, financing, housing, interpretation, and evaluation of libraries. Student projects relate the processes to specific types of libraries. Prerequisite: 9 hours in librarianship. Kemper, Pierron.

Lib 541. History of the Book. 3 hours.

Development of the book in its various forms from earliest times to the present; origin and evolution of the alphabet and scripts; history of manuscript books; invention and spread of printing; production and distribution of printed books. Emphasis on the relation of books to social conditions in the various periods studied. Hintz.

Lib 543. Instructional Materials Centers: Resources and Services. 3 hours.

Advanced problems in the organization and administration of the school library as an instructional materials center at the system, district, and regional level. Prerequisite: Lib 432 or consent of instructor. Pond.

Lib 555. Reading of Adolescents. 3 hours.

Survey of books and nonbook materials suitable for students of junior and senior high-school age; emphasis on selection and evaluation of books, adolescent reading interest, and reading guidance for curricular and personal needs. Prerequisite: consent of instructor for undergraduates. Pond.

Lib 558. Storytelling. 3 hours.

Fundamental principles of the art of storytelling, including the planning of a story hour, location of suitable materials for use, and the techniques of learning and presenting the story; study and selection of literature appropriate for oral presentation to children of all ages. Feller.

Lib 561. Literature of the Humanities. 3 hours.

The role of the humanities in contemporary society; survey of the development of the literature associated with the humanistic disciplines, with emphasis on key men, books, and terminology; acquisition and handling of specialized resources. McCollough.

Lib 562. Literature of the Sciences. 3 hours.

Survey and evaluation of library materials in the fields of science and technology; problems of scientific documentation; literature searching methods; compilation, classification, and reporting of information. Morrison.

Lib 563. Literature of the Social Sciences. 3 hours.

Survey of key men and ideas in the social sciences, with emphasis on past development and present tendencies; source materials for research; selection of books, maps, periodicals, etc. for school and college libraries and for personal reading; introduction to the bibliography of each of the social sciences. Designed for all interested students as well as library majors. Jones.

Lib 571. Research in Librarianship. 3 hours.

Survey of library literature, with attention to significant research in librarianship; selection and definition of a project, collection of data, historical, experimental, and descriptive methods, evaluation of data, statistical concepts; values of research in librarianship. Kemper.

Lib 572. Library Automation. 3 hours

Flow of recorded information in library development and use, with emphasis on mechanical aids and systems of control. Data-processing techniques from punched cards to computers. Basics of systems analysis and evaluation as applied to library procedures. Prerequisite: Lib 512. Kemper.

COURSE OFFERED ONLY IN SUMMER SESSIONS**Lib 508. Workshop.** Hours to be arranged.

Medical School

DAVID W. E. BAIRD, M.D., LL.D., Dean of the Medical School.

CHARLES N. HOLMAN, M.D., Associate Dean of the Medical School; Medical Director of Hospitals and Clinics.

WILLIAM A. ZIMMERMAN, B.S., Associate Dean for Business Affairs.

JOSEPH J. ADAMS, B.B.A., Assistant Dean.

RICHARD L. SLEETER, M.D., Assistant Dean.

CAROLINE H. POMMARANE, B.S., Registrar.

MARGARET HUGHES, B.S., Librarian.

THE UNIVERSITY OF OREGON MEDICAL SCHOOL, located in Portland, was chartered in 1887, as Oregon's second medical school. The first, the medical department of Willamette University, was merged with the University of Oregon Medical School in 1913. The campus is a 101-acre tract in Sam Jackson Park overlooking the city. Located on the same campus are the University of Oregon Dental School and the University of Oregon School of Nursing.

The Medical School offers a standard curriculum in medicine, leading to the M.D. degree, a special five-year combined medical and graduate program leading to the M.S. and M.D. degrees, graduate studies in the basic sciences leading to the M.S. and Ph.D. degrees, programs in medical technology leading to the B.S. and M.S. degrees, a two-year program in radiologic technology, an internship in hospital dietetics, affiliations in physical and occupational therapy, and training in cytotechnology and orthoptic technique. The school's internship and residency programs provide more than 180 appointments to qualified physicians. Extensive continuing education programs are conducted for physicians and medical technologists.

The Medical School's hospitals and clinics, located on the campus, provide teaching laboratories for clinical studies; 13,000 patients receive medical services and treatment annually in the school's hospitals; recorded visits to the school's outpatient clinics total more than 220,000 each year. The Medical School's research program is supported through funds provided by the state and Federal governments and by foundations and private donors; research grant expenditures total approximately \$6,000,000 annually.

Curriculum in Medicine. The curriculum in medicine leading to the M.D. degree requires a minimum of three years of premedical studies, followed by four years of work at the Medical School.

A student entering the Medical School without a Bachelor of Arts or Bachelor of Science degree must complete the work required for one of these degrees at the University of Oregon or at the institution at which he received his premedical preparation, before entering upon the work of the third year in the Medical School.

The University of Oregon and most of the colleges and universities of the Pacific Northwest recognize credit earned by a student during his first two years at the Medical School as credit earned in residence toward the bachelor's degree.

A suggested premedical curriculum for students planning to enter the Medical School is presented on pages 206-207 of this Catalog.

Curriculum in Medical Technology. The curriculum in medical technology leading to the bachelor's degree is a four-year program, including three years of work on the Eugene campus of the University, followed by one year at the Medical School. See page 205 of this Catalog.

Medical School Catalogs. Separate catalogs describing the curricula in medicine and medical technology and the graduate programs in the basic sciences may be obtained from the Medical School.

School of Music

ROBERT M. TROTTER, Ph.D., Dean of the School of Music.

Professors: EXINE A. BAILEY, GEORGE BOUGHTON, E. A. CYKLER, MILTON DIETERICH (emeritus), J. R. HLADKY, GEORGE HOPKINS (emeritus), HOMER KELLER, R. E. NYE, JANE THACHER (emeritus), R. M. TROTTER, R. S. VAGNER.

Associate Professors: F. W. BITTNER,* LESLIE BREIDENTHAL, FLOYD ELLEFSON, J. M. GUSTAFSON,† JOHN HAMILTON, I. D. LEE, M. D. RISINGER, ROYCE SALTZMAN, VIRGINIA WHITFIELD, N. E. WILSON, W. C. WOODS.

Assistant Professors: PETER BERGQUIST, DORIS CALKINS, GABRIEL CHODOS, R. G. CUNNINGHAM,‡ GARY MARTIN, LAWRENCE MAVES, JOHN McMANUS, JAMES MILLER, HAROLD OWEN, RICHARD TROMBLEY, MONTE TUBB.

Instructors: YORIKO T. CHODOS, ROBERT HURWITZ.

Assistants: R. W. ANDERSON, R. L. BARBOUR, E. I. BERRY, W. P. BUEHNING, K. E. COULTER, D. E. CUMMINGS, C. A. DIMOND, B. K. ERLINGS, D. S. GOEDECKE, D. L. GRUENINGER, J. A. HEMPE, L. R. HEMPE, R. E. HENDERSON, P. E. HILLSTROM, P. D. HOOVER, J. A. KEMPSTER, E. L. KLEEHAMMER, EARL NORWOOD, C. J. READ, D. L. SHRADER, J. A. WYCKOFF.

IN THE SCHOOL OF MUSIC, students learn by performing and by listening to music, by analyzing musical style, and by examining the historical contexts—artistic, philosophical, social, political, technological—in which our musical heritage has developed. Courses and curricula are planned to provide a vital unity of musical education and technical training, emphasizing the juncture where ideas and understanding meet direct experience of musical beauty.

The school recognizes two basic obligations: (1) the preparation of professional musicians for careers as performers, teachers, composers, scholars, and critics; (2) as a part of the University's program of liberal education, instruction in the history and understanding of music for all students and instruction in musical performance for students interested in performance as an avocation.

A department of music was established at the University of Oregon in 1886. The School of Music was organized in 1902, and was admitted to membership in the National Association of School of Music in 1928. The standards of the school are in accordance with the standards set by the association.

Instruction for Nonmajors. The following courses offered by the School of Music are planned especially for nonmajor students who have had little or no previous musical instruction: Introduction to Music and Its Literature (Mus 201, 202, 203); Music Fundamentals (Mus 321, 322); Listening with Understanding (Mus 450); The Music of Bach and Handel (Mus 451); The Classic Symphony and Sonata (Mus 452); Introduction to Opera (Mus 453); Introduction to Twentieth-Century Music (Mus 454).

Nonmajor students who meet proficiency requirements may also enroll in several ensemble groups, including band, orchestra, chorus, chamber ensemble, and opera workshop, and for performance instruction if facilities are available.

Admission to Major Curricula. The major curricula in music are organized on an upper-division and graduate basis. Preparation for the major consists of two years of work in the College of Liberal Arts, under the guidance of a faculty

* On sabbatical leave, spring term, 1967-68.

† On leave of absence, 1967-68.

‡ On sabbatical leave, winter and spring terms, 1967-68.

adviser from the School of Music. The lower-division program includes introductory work in music history, theory, and performance, in addition to studies in the arts and sciences providing a broad intellectual basis for advanced work in the music major.

It is important that high-school students planning to major in music acquire, before entering the University, a thorough knowledge of standard musical symbols and terminology, some knowledge of the piano keyboard, considerable proficiency in performance, and as wide an acquaintance as possible with great music.

During registration week, all new students are given auditions to determine their eligibility for private performance studies and examinations in basic musical grammar and keyboard knowledge to test their aptitude and readiness for introductory theoretical studies (information concerning these examinations may be obtained from the School of Music office). Exceptionally well-prepared and gifted students may be granted advanced placement or exemption from certain introductory studies on the basis of the examinations.

Because the upper-division program is planned in continuity with basic courses taken during the first two years, students planning to major in music at the University of Oregon are strongly advised to enter the University as freshmen. Students transferring from other institutions with preprofessional preparation differing from the University pattern may, however, be admitted to the professional curriculum if they show satisfactory proficiency by examination.

The proficiency examinations are required of all students, including transfers and students who have taken their lower-division work at the University, before admission to upper-division major programs (information concerning these examinations may be obtained from the School of Music office).

All degree candidates in music are required to attend campus musical events each year of residence as follows: 12 or more credits, 10 events per term; 8-11 credits, 8 events per term; 1-7 credits, 5 events per term.

Facilities. The School of Music is housed in a building complex designed for instruction, practice, and performance—including an auditorium seating 600 persons, rehearsal rooms, studio-offices, classrooms, and more than fifty practice rooms. The school's equipment includes William Dowd and Wittmayer concert harpsichords, a two-manual Schlicker organ, a four-manual Reuter organ, and a number of Steinway grand pianos. The University Theater in Villard Hall provides facilities for operas and other stage productions.

The music holdings of the University Library include a large collection of scores, complete critical editions of the works of the great composers, standard reference works, and extensive collections of periodicals, recordings, and books on music. The music collection is supported by gifts from Phi Beta and Mu Phi Epsilon and a bequest from the late Matthew H. Douglass, former University librarian. Through acquisitions under the Farmington Plan, the Library has a particularly strong and growing collection of contemporary foreign books on music.

Musical Organizations. The University Symphony and String Orchestras, the University Singers, the University Chorale, Chamber Choir, Men's Glee Club, University bands, and the Opera Workshop offer membership and performance opportunities to all qualified students. Collegium Musicum, a vocal-instrumental group, provides opportunity for the study of mediaeval, Renaissance, and baroque music. The work of these organizations is planned to complement the theoretical and historical courses offered by the school. A Stage Band is available as an extra-curricular activity.

Concerts and Recitals. Frequent concerts and recitals are presented on the campus throughout the year, by visiting artists, members of the faculty of the School of Music, and advanced music students. Regularly scheduled concerts include performances by artists of international fame sponsored by the Eugene-University Civic Music Association and the Little Concert Series.

Music Fees. Students majoring in music who are eligible for Mus 190 or above pay no special fees for private performance instruction. Fees for private vocal or instrumental instruction for all other students are: ten half-hour lessons, \$30 per term; twenty half-hour lessons, \$50 per term. These fees are due at the time of registration each term.

Fees for the use of practice rooms, paid by all students enrolled for private instruction, are: \$5.00 per term for one hour a day (\$3.00 for rooms without a piano); \$9.00 per term for two hours (\$6.00 without a piano); \$12.00 per term for three hours (\$9.00 without a piano); \$15.00 per term for four hours (\$12.00 without a piano). The organ practice fee is \$12.00 per term for one hour a day.

Curricula in Music

THE SCHOOL OF MUSIC offers undergraduate curricula leading to the Bachelor of Arts and Bachelor of Music degrees and graduate work leading to the Master of Arts, Master of Music, and Doctor of Musical Arts degrees.

In the undergraduate program, the candidate for the B.A. degree takes approximately one-third of his work in music and two-thirds in fields outside the school. B.A. candidates are advised to plan their programs to broaden their understanding of music in its relations to other humanistic fields; studies in art, philosophy, history, languages and literature, speech and drama, and the dance are especially recommended.

The candidate for the B.Mus. degree takes approximately two-thirds of his work in the School of Music and one-third in fields outside the school.

The programs outlined below show only the minimum requirements; additional studies may be required in the light of individual needs.

Lower-Division Major Requirements. Completion of the following lower-division work in music is required of candidates for the B.A. or B.Mus. degree for admission to upper-division degree programs:

First Year	Term Hours
Musicianship I (Mus 121, 122, 123).....	12
Ensemble (selected from Mus 195, Mus 196, Mus 197).....	3
Performance Studies (Private Instruction) (Mus 190).....	3
Second Year	
Musicianship II (Mus 221, 222, 223).....	12
History of Music (Mus 204, 205, 206).....	9
Ensemble (selected from Mus 195, Mus 196, Mus 197).....	3
Performance Studies (Private Instruction) (Mus 190 or above).....	3

All entering students are required to pass a test in piano proficiency or enroll in Functional Piano (Mus 50) until they have attained the required proficiency. The test must be passed before enrollment in upper-division courses in music.

History of Western Civilization (Hst 101, 102, 103) is recommended for the satisfaction of the social science group requirement; psychology with laboratory is recommended for the satisfaction of the science group requirement.

Candidates for the B.A. degree and voice majors working toward the B.Mus. degree must acquire proficiency in French, German, or Italian equivalent to that expected after two years of college study of the language.

Elementary Aesthetics (Phl 222) and either History of Western Art (ArH 204, 205, 206) or World Literature (Eng 107, 108, 109) are required for all candidates for the B.A. degree.

All candidates for the B.Mus. degree specializing in performance must, during their lower-division years, attain performance proficiency equivalent to that required for the completion of Mus 290. Definitions of competencies at all levels are available in the School of Music office.

Upper-Division Major Requirements. Completion of the following upper-division work is required of all candidates for the B.Mus. or the B.A. degree in music:

	Term Hours
Music before 1600 (Mus 360), Music from 1600 to 1750 (Mus 361), Avant-garde Music in the 20th Century (Mus 362).....	9
Music Literature (400 level).....	3
Additional upper-division music.....	12
Requirements for each specialty (see below).	

All candidates for the B.A. degree must complete a senior project demonstrating a satisfactory level of achievement as performer, scholar, or composer.

During their upper-division years, all candidates for the B.Mus. degree must, in addition: (1) complete a minimum of 12 term hours in private performance study on a major instrument or in voice and achieve a proficiency equivalent to that required for the completion of Mus 290; (2) complete a minimum of 3 term hours of work with an ensemble group chosen from Mus 395, Mus 396, Mus 397, and Mus 398. Additional requirements for each specialty are as follows:

Performance. (1) Achievement of proficiency on a major instrument or in voice equivalent to that required for the completion of Mus 490; (2) senior recital; (3) for students specializing in voice, proficiency in piano equivalent to that required for completion of Mus 190.

Music Theory. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434); (2) Composition (Mus 340, 341, 342); (3) Instrumentation and Orchestration (Mus 336, 337, 338); (4) upper-division theory or history courses, 6 term hours; (5) senior lecture-recital.

Composition. (1) Counterpoint I (Mus 333, 334, 335), Counterpoint II (Mus 433, 434); (2) Composition (Mus 340, 341, 342), Composition (Mus 440, 441, 442); (3) Instrumentation and Orchestration (Mus 336, 337, 338); (4) senior presentation of an original work.

Music Education, All Fields. Satisfaction of education requirements for an Oregon secondary-teaching certificate (see page 321); (1) Orientation to Music Education (MuE 316); (2) Special Teaching Methods (MuE 408), 4 term hours; (3) Colloquium in School Music (MuE 418); (4) Ensemble (Mus 395, 396, 397), 3 term hours;* (5) additional requirements for one of the options listed below.

Music Education, Choral-General. (1) Choral Conducting (Mus 385, 386), 4 term hours; (2) Instrumental Conducting (Mus 387); (3) class instruction in instrumental techniques (Mus 392, Strings, Brass, Woodwind), 3 term hours; (4) Choral Arranging (Mus 439); (5) Choral Materials for Schools (Mus 444); (6) Performance Study, completion of Mus 290, voice or piano, and completion of 3 terms in Mus 190, voice.

Music Education, Instrumental. (1) Instrumental Conducting (Mus 387, 388); Choral Conducting (Mus 385); (3) class instruction in techniques (voice, 3 term hours; instrumental, 9 term hours) (Mus 392); (4) Instrumentation and Orchestration (Mus 336, 337); (5) of the 12 term hours in private performance studies required of all B.Mus. candidates, a minimum of 9 term hours in Mus 390, Mus 391, or Mus 490.

Secondary-School Teaching of Music. For certification as a teacher of music in Oregon high schools, the Oregon State Department of Education requires (1) the satisfaction of certain minimum standards of subject preparation and (2) the recommendation of the institution at which the student completes his subject preparation.

* In addition to ensemble requirement for all B.Mus. candidates.

To meet the state standards in music and the requirements for recommendation by the University of Oregon, the student must complete the general requirements for a major in music and the requirements for a music education option, listed above.

For further information, the student should consult a member of the music faculty who serves as adviser for prospective teachers.

Honors. See HONORS COLLEGE, pages 130 ff.

Minor in Music. Musicianship I or Music Fundamentals (Mus 121, 122, 123 or Mus 321, 322, MuE 383) ; music history or literature (Mus 201, 202, 203 or Mus 204, 205, 206) ; performance study, 3 hours ; ensemble, 3 hours ; and electives to complete 36 hours.

Graduate Work. The School of Music offers graduate work leading to the M.A., M.Mus., and D.M.A. degrees.

Master of Arts—music history, music theory, music education.

Master of Music—composition, music education, performance and music literature, church music.

Doctor of Musical Arts—college teaching in the field of performance or music education. Requirements include work in music history and literature, music theory, music pedagogy and curriculum planning ; performance, composition, conducting, or arranging ; relevant studies outside music. For further information, see the Graduate School Catalog and consult the School of Music.

Candidates for the Doctor of Education degree or the Doctor of Philosophy degree in the School of Education may choose music education as a field of major specialization.

During fall-term registration week and the first week of summer session, all entering candidates for graduate degrees in music, including graduates of the University of Oregon, are required to take a series of examinations to test the adequacy of their preparation for graduate study. Deficiencies shown by the examinations must be remedied before the student is formally admitted to candidacy for a graduate degree. Information concerning the examinations and guides for study are available in the School of Music office.

Music

LOWER-DIVISION COURSES

*Mus 50. **Functional Piano.** 1 hour any term (3 hours maximum credit.)

Classroom instruction in such skills as sight reading, playing by ear, transposing, and harmonizing. Prerequisite: audition. Erlings, staff.

*Mus 51. **Basic Voice.** 1 hour any term (3 hours maximum credit).

Classroom instruction for students ineligible for voice instruction at the level of Mus 190. Prerequisite: audition. Risinger, staff.

*Mus 52. **Basic Music.** 1 hour.

Remedial instruction for music majors who are deficient in preparation for work in musicianship. To be taken concurrently with Mus 121.

Mus 121, 122, 123. **Musicianship I.** 4 hours each term.

Study of the disciplines of hearing, performing, analyzing, improvising, and composing different kinds of music ; terminology, concepts, and the development of aural-visual acuity. Cunningham, Hurwitz, Owen, Tubb.

Mus 190. **Performance Studies (Private Instruction).** 1-4 hours any term.

Individual instruction in the technical and stylistic aspects of artistic solo performance. Students specializing in performance normally enroll for two half-hour lessons a week (2 term hours of credit) in their major instrument

* No-grade course.

each term during their undergraduate years. Maximum credit in performance studies for nonmajors, 12 term hours; for candidates for B.A. degree with a major in music, 24 term hours, including not more than 12 hours during freshman and sophomore years. Information concerning required levels of proficiency at each level (Mus 190 through Mus 590) may be obtained in the School of Music office. Prerequisite: audition.

Piano—Bittner, G. Chodos,
Y. Chodos, Woods.
Voice—Bailey, Breidenthal,
Miller, Wilson.
Organ—Hamilton.
Harpsichord—Hamilton.
Violin—Boughton, Maves.
Viola—Boughton.
Cello—Hladky.

String Bass—Hladky.
Woodwind Instruments—Bergquist.
Cunningham, McManus,
Trombley, Vagner.
Brass Instruments—Hillstrom,
Lee, Lewis.
Percussion Instruments—Schrader.
Harp—Calkins.

Mus 195. Band. 1 hour each term (6 hours maximum credit).

Fall: marching band, laboratory band; winter and spring: concert band, symphonic band. No prerequisites for marching band; audition required for laboratory, concert, and symphonic band. Upper-division students enroll in Mus 395. Lee, Vagner, Lewis.

Mus 196. Orchestra. 1 hour each term (6 hours maximum credit).

Prerequisite: audition; consent of instructor. Upper-division students enroll in Mus 396. Boughton, Maves.

Mus 197. Chorus. 1 hour each term (6 hours maximum credit).

Prerequisite: audition; consent of instructor. Upper-division students enroll in Mus 397. Miller, Risinger, Saltzman, Wilson.

Mus 201, 202, 203. Introduction to Music and Its Repertoire. 3 hours each term.

Cultivation of understanding and intelligent enjoyment of music through a study of its elements, forms, and historical styles. For nonmajors; music majors enroll in Mus 204, 205, 206. G. Chodos.

Mus 204, 205, 206. History of Music. 3 hours each term.

Fall: basic stylistic concepts; the classical period through Beethoven. Winter: the romantic period through Brahms and Mahler. Spring: conservative trends in the twentieth century. Primarily for music majors. Not open to students who have had Mus 201, 202, 203. Prerequisite: Mus 121, 122, 123. Hurwitz.

Mus 221, 222, 223. Musicianship II. 4 hours each term.

A continuation of Mus 121, 122, 123. Prerequisite: Mus 123 or equivalent. Cunningham, Hurwitz, Owen, Tubb.

Mus 290. Performance (Private Instruction). 1-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 190. For further information, see Mus 190.

UPPER-DIVISION COURSES

Mus 321, 322. Music Fundamentals. 2 hours each term.

Study of musical notation and terminology; rudiments of sight singing and ear training; introduction to simple melodic and rhythmic instruments. Designed to provide students without previous musical training with some insight into musical language and basic performance skills. Not open to music majors. Required in the elementary education program and for majors in recreation leadership and in camping and outdoor education. 2 recitations; 2 one-hour laboratories. Martin, Nye, Whitfield, staff.

Mus 330, 331, 332. Form and Analysis. 2 hours each term.

Stylistic analytical technique, including formal structures and harmonic, melodic, and rhythmic practices, applied to compositions from representative periods and media. Prerequisite: Mus 223. Bergquist.

Mus 333, 334, 335. Counterpoint I. 2 hours each term.

Techniques of two- and three-voice contrapuntal writing as exemplified in

sixteenth-, eighteenth-, and twentieth-century practice. Prerequisite: Mus 223. Hurwitz, Owen.

Mus 336, 337, 338. **Instrumentation and Orchestration.** 2 hours each term.

Study of the instruments of the orchestra and band; the practical art of scoring for various instrumental choirs and large ensembles. Prerequisite: Mus 223. Keller, Owen, Tubb.

Mus 340, 341, 342. **Composition I.** 2 hours each term.

Composition in the smaller forms for piano, voice, and small ensembles. Prerequisite: Mus 223. Keller.

Mus 360. **Music Before 1600.** 3 hours.

Plainsong; sacred and secular monody and polyphony through Lassus, the Gabriellis, Dowland, and Gibbons; instrumental music of the sixteenth century; music of the Reformation. Primarily for music majors. Prerequisite: Mus 206. Hamilton, Trombley.

Mus 361. **Music from 1600 to 1750.** 3 hours.

Analysis of representative works from Monteverdi to Domenico Scarlatti. Differentiation of musical styles; various national schools; performance practices and musical thought; development of forms and procedures that continue into the twentieth century, such as opera, concerto, fugue, sonata, etc. Primarily for music majors. Prerequisite: Mus 360. Hamilton, Trombley.

Mus 362. **Avant-garde Music in the Twentieth Century.** 3 hours.

The concept of newness in music viewed historically and in the styles of representative composers from Satie and Debussy to Stockhausen and Cage. Primarily for music majors. Prerequisite: Mus 361. Hamilton, staff.

Mus 385, 386. **Choral Conducting.** 2 hours each term.

Study of conducting techniques, with emphasis on practical application to choral organizations; score reading; analysis and interpretation of choral literature. Conducting experience with laboratory chorus. Prerequisite: Mus 223; consent of instructor. Risinger, Saltzman.

Mus 387, 388. **Instrumental Conducting.** 2 hours each term.

Baton techniques, with emphasis on practical application to instrumental organizations; score reading; general problems of the conductor of larger instrumental ensembles. Conducting experience with laboratory ensembles. Prerequisite: Mus 223; consent of instructor. Lee, Vagner.

Mus 390. **Performance Studies (Private Instruction).** 2-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 290; jury audition. For further information, see Mus 190.

Mus 391. **Performance Studies (Private Instruction).** 2 hours any term.

Prerequisite: successful completion of Mus 290. For instructors, see Mus 190.

Mus 392. **Instrumental Techniques (Class Instruction).** 1 hour any term.

Elementary instruction in orchestral instruments and voice. Primarily for majors in school music. 2 recitations.

Violin and Viola—Boughton.

Oboe and Bassoon—Cunningham.

Clarinet and Saxophone—Vagner, Cunningham.

Flute—Trombley.

French Horn—Lee.

Trumpet and Trombone—Lee, Lewis.

Percussion Instruments—Schrader.

Cello and String Bass—Hladky.

Voice—Risinger.

Mus 394. **Chamber Ensemble.** 1 hour each term (6 hours maximum credit).

Study of masterpieces of music through small group rehearsal. For stringed-instrument and wind-instrument players, pianists, and singers. Prerequisite: audition.

Mus 395. **Band.** 1 hour each term (6 hours maximum credit).

Fall: marching band, laboratory band; winter and spring: concert band, symphonic band. Prerequisite: marching band, upper-division standing; laboratory, concert, and symphonic band, upper-division standing and audition. Lee, Vagner.

Mus 396. Orchestra. 1 hour each term (6 hours maximum credit).

Prerequisite: upper-division standing; audition. Boughton.

Mus 397. Chorus. 1 hour each term (6 hours maximum credit).

Prerequisite: upper-division standing; audition. Risinger, Miller, Saltzman, Wilson.

Mus 398. Opera Workshop. 2 hours each term (6 hours maximum credit).

Study of traditional and contemporary operatic literature through analysis, rehearsal, and performance of complete operas and excerpts; training in stage movement, diction, and rehearsal techniques. Prerequisite: upper-division standing; consent of instructor. Miller.

Mus 405. Reading and Conference. Hours to be arranged.

Prerequisite: consent of dean.

Mus 419. Senior Colloquium in Music. 3 hours.

Exploration of interrelationships among the various areas in music.

Mus 490. Performance Studies (Private Instruction). 2-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 390; consent of instructor. For further information, see Mus 190.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

Mus 407. Seminar. (G) Hours to be arranged.

Mus 425. Advanced Keyboard Harmony. (G) 2 hours.

Realization of figured bass notation in the light of baroque performance practices; extempore playing, with analysis and improvised application of diminution and modulatory technique over chromatic bass lines. Prerequisite: Mus 223, Mus 335, consent of instructor.

Mus 426, 427. Score Reading. (G) 2 hours.

Analysis of musical scores of compositions for small and large ensembles involving transposition of parts; use of the piano as a means of studying ensemble scores. Prerequisite: Mus 424 or equivalent.

Mus 433, 434. Counterpoint II. (G) 2 hours each term.

Writing of instrumental polyphony, based on the style of J. S. Bach; study of invertible counterpoint and other contrapuntal techniques, with application in the canon, two- and three-part invention, and fugue. Prerequisite: Mus 335. Keller.

Mus 436, 437. Advanced Orchestration. (G) 2 hours each term.

Continuation of Mus 338. Emphasis on the scoring of original work and on the arranging of major works from other media; study of various styles of scoring by master composers. Prerequisite: Mus 338. Keller.

Mus 438. Band Arranging. (G) 3 hours.

Scoring for larger combinations of wind instruments, including the concert band, the marching band, and the stage band. Prerequisite: Mus 337. Lewis.

Mus 439. Choral Arranging. (G) 3 hours.

Techniques of arranging for various types of choral groups, both accompanied and a cappella. Prerequisite: Mus 223. Owen, Tubb.

Mus 440, 441, 442. Composition II. (G) 2 hours each term.

Composition in larger forms for large instrumental combinations. Prerequisite: Mus 342. Keller.

Mus 450. Listening with Understanding. (g) 3 hours, fall or winter.

Introduction to perceptive listening through analysis of various types of music (Gregorian chant through jazz); collateral reading, class discussion, and individual presentation. Not open to music majors or students with credit in Mus 201, 202, 203.

Mus 451. The Music of Bach and Handel. (g) 3 hours, winter.

Theatrical, churchly, and chamber styles in Germany, France, and Italy, as represented by selected masterpieces of Bach and Handel; concerto grosso, dance suite, organ chorale, cantata, oratorio, and mass. Primarily for nonmajors. Prerequisite: Mus 203 or Mus 450. Offered alternate years.

Mus 452. The Classic Symphony and Sonata. (g) 3 hours spring.

The classic symphony and sonata as developed by Haydn, Mozart, and Beethoven; elements of style in the Viennese classic period, and its legacy in the nineteenth century. Primarily for nonmajors. Prerequisite: Mus 203 or Mus 450. Offered alternate years.

Mus 453. Introduction to Opera. (g) 3 hours winter.

The fusion of theatrical and musical modes of dramatic expression; class study of such masterpieces as *Le nozze di Figaro*, *Carmen*, *Otello*, *Tristan und Isolde*, *Wozzeck*, *Pelléas et Mélisande*, *The Rake's Progress*. Primarily for nonmajors. Prerequisite: Mus 203 or Mus 450. Offered alternate years. Maves.

Mus 454. Introduction to Twentieth-Century Music. (g) 3 hours spring.

Evolution and revolution in musical style since Debussy and Mahler; study of selected masterpieces by such composers as Stravinsky, Bartok, Schoenberg, Copland, and Varèse. Primarily for nonmajors. Prerequisite: Mus 203 or Mus 450. Offered alternate years.

Mus 455, 456, 457. Orchestral Literature. (G) 2 hours each term.

Major types of orchestral music, from the eighteenth to the twentieth century; dance suite, symphony, tone poem, descriptive suite; pieces for string orchestra. Prerequisite: Mus 361. Offered alternate years. Hladky.

Mus 458. Organ Literature. (G) 3 hours.

The organ in church and concert; organ repertoire from the fifteenth century to the present. Prerequisite: Mus 361. Hamilton.

Mus 459. Wind-Instrument Literature. (G) 3 hours.

Survey of literature for brass instruments and woodwinds from the sixteenth century to post-World War II; emphasis on style as it affects performance and on the development of bases for critical judgment. Prerequisite: Mus 361. Vagner.

Mus 460. Song Literature. (G) 3 hours.

Solo songs with accompaniment; the lute air and Purcell; the nineteenth-century art song in Germany and France; twentieth-century British, American, and continental song literature; development of bases for artistic performance and sound critical judgment through study of text, voice, and accompaniment. Prerequisite: Mus 361. Miller, Wilson.

Mus 461, 462, 463. Chamber-Music Literature. (G) 2 hours each term.

Basic literature of the string quartet and other ensembles using piano and strings; emphasis on style as it affects performance and on the development of bases for artistic performance and critical judgment. Prerequisite: Mus 361. Hladky.

Mus 464, 465, 466. Piano Literature. (G) 2 hours each term.

Survey of solo piano music from J. S. Bach to the present; original works for four hands and for two pianos; the concerto; emphasis on style as it affects performance and critical judgment. Prerequisite: Mus 361. Woods.

Mus 467. Hymnology. (G) 3 hours.

History and interpretation of the Christian hymn, both as literature and music; criteria for the selection of hymn texts and tunes; various denominational hymnals; the use of hymns in worship. Saltzman.

Mus 468. Liturgics. (G) 3 hours.

Study of formal rituals of worship in Eastern and Western churches from the pre-Christian era to the present, with particular reference to the forms and styles of their associated music. Saltzman.

Mus 469. Sacred Choral Music. (G) 3 hours.

Survey of choral music for church and concert use based on liturgical and nonliturgical sacred themes; performance practices of various styles; development of criteria for judging aesthetic quality of the music and its performance. Saltzman.

Mus 470, 471. Administration of Church Music. (G) 2 hours each term.

Developing the music program of the church; relation of the ministry of music to the music committee, pastor, and parish; volunteer choir organization; music in the church school. Saltzman.

Mus 472. Music in Worship. (G) 2 hours.

Theory and practice of music in the corporate worship of nonliturgical churches, with attention to the functions of the congregation, organ, and choir. Saltzman.

Mus 485, 486. Advanced Conducting. (G) 3 hours each term.

First term: choral; second term: instrumental. Prerequisite: Mus 386 or Mus 388; consent of instructor. Risinger, Vagner.

Mus 493. Collegium Musicum. (G) 1 hour each term.

Study of music repertoire of the mediaeval, Renaissance, and baroque periods through rehearsals and extensive sight reading; vocal and instrumental repertoire. Owen.

GRADUATE COURSES

Mus 501. Research.** Hours to be arranged.Mus 503. Thesis.** Hours to be arranged.**Mus 505. Reading and Conference.** Hours to be arranged.**Mus 507. Seminar.** Hours to be arranged.

Composition.
Music History.
Music Theory.
Church Music.

Mus 511, 512, 513. Research Methods in Music. 3 hours each term.

Mus 511: use of general bibliographical sources and reference materials in music. Prerequisite to *either* Mus 512, a consideration of research methods in music history and theory, *or* Mus 513, a consideration of methodological problems in studies of music in relation to music education, acoustics, psychology, and aesthetics. Martin, Trombley, staff.

Mus 533, 534. Twentieth-Century Counterpoint. 2 hours each term.

Techniques of present-day contrapuntal practice; application in larger contrapuntal forms. Prerequisite: Mus 434. Keller.

Mus 540, 541, 542. Composition for Electronic Media. 3 hours each term.

Electronic-music instruments and techniques; creative use of sound generators and tape-recording equipment. Prerequisite: graduate standing; consent of instructor. Keller, Hunter.

Mus 560. Music in the Middle Ages. 3 hours fall.

Music in the quadrivium; the writings of Boethius; varieties of liturgical music, particularly Gregorian; performance theories. Pitch notation, rhythmic theory and early polyphony at Notre Dame; poetic influences on musical form; French and Italian *Ars nova*. Bergquist, Hamilton.

Mus 561. Music in the Renaissance. 3 hours winter.

The influence of Italian humanism on continental and English styles. Poetic and musical practice in mass, motet, and secular choral song. Notational developments; music printing. Luther and music; neo-Aristotelian rhetorical theory; Counter-Reformation in Rome and Venice. Bergquist, Hamilton.

Mus 562. Music in the Baroque Era. 3 hours spring.

Musica poetica and humanistic traditions; florid gesture and large statement in the arts. Monody, *concertato*, *Affektenlehre*, fugal textures; growth, transfer, and fusion of national and generic styles; performance practices; the rococo in France and Italy. Bergquist, Hamilton.

Mus 563. Music in the Classical Period. 3 hours fall.

Philosophical sources of classic style in Kant and Rousseau; sensibility, *Sturm und Drang*, the gallant style; dramatic forms and procedures in opera, sonata, and concerto. Bergquist.

Mus 564. Music in the Romantic Era. 3 hours winter.

The heritage of Beethoven; virtuosic and lyric extremes in instrumental and vocal styles. Literary romanticism, descriptive music and the *Lied*; opera in France and Italy; Wagner's music drama as *Gesamtkunstwerk*; the composer as philosopher, critic and political figure; the rise of music nationalism; Wagnerism in France; symbolism and Debussy. Bergquist.

Mus 565. Music in the Twentieth Century. 3 hours spring.

The continuation of romantic ideals; Freud and musical expressionism; political, sociological, and scholarly influences on composing and performing style; eclecticism and Stravinsky. Implications of recent developments. Bergquist.

Mus 590. Performance Studies (Private Instruction). 2-4 hours any term.

Prerequisite: proficiency required for satisfactory completion of Mus 490; sufficient talent to justify the undertaking of graduate studies in performance; jury audition. For instructors, see Mus 190.

Mus 591. Performance Studies (Private Instruction). 1 hour any term (3 hours maximum credit).

For graduate students not specializing in performance. Prerequisite: proficiency required to complete Mus 290; jury audition.

Mus 592. Performance Studies (Private Instruction). (p) 1 hour any term (3 hours maximum credit).

For graduate students who need instruction in a supplementary performance area. Prerequisite: proficiency in another instrument or voice required for admission to Mus 390 or Mus 391; jury audition.

Mus 594. Chamber Ensemble. 1 hour any term.**Mus 595. Symphonic Band.** 1 hour any term.**Mus 596. Orchestra.** 1 hour any term.**Mus 597. Chorus.** 1 hour any term.**Mus 598. Opera Workshop.** 1 hour any term.

Music Education

UPPER-DIVISION COURSES

MuE 316. Orientation to Music Education. 3 hours.

A survey of school music, including observation of the total school-music program, McManus, staff.

MuE 383. Music Methods for Elementary Teachers. 3 hours.

Planning and organizing musical activities for elementary school children. Required for elementary-education majors. Prerequisite: Mus 321, 322. Martin, Nye, Whitfield.

MuE 405. Reading and Conference. Hours to be arranged.

Prerequisite: consent of dean.

MuE 408. Special Teaching Methods. 2 hours each term.

Parallels student teaching in the elementary and secondary schools. Observa-

tion, reports, and conferences on materials and procedures used in music teaching. Ellefson, McManus, Nye, Whitfield.

MuE 418. Colloquium in School Music. 3 hours.

An analysis of the interrelationships among the various areas of the field of music, to be taken in the last term of the senior year. Whitfield, staff.

MuE 426, 427. The General Music Program. 3 hours each term.

Organizing and defining objectives of general music courses. Elementary (MuE 426); Secondary (MuE 427). Nye, Whitfield.

UPPER-DIVISION COURSES CARRYING GRADUATE CREDIT

MuE 407. Seminar. (G) Hours to be arranged.

MuE 444. Choral Materials for Schools. (G) 2 hours.

Repertoire for choral groups in secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Risinger.

MuE 445. String Materials for Schools. (G) 2 hours.

Repertoire for orchestra and other stringed-instrument groups in elementary and secondary schools; problems of leadership, presentation, organization, and program planning. Prerequisite: consent of instructor. Hladky.

MuE 446. Wind-Instrument Materials for Schools. (G) 2 hours.

Repertoire for bands and other wind-instrument groups in elementary and secondary schools; problems of leadership, presentation, and organization. Prerequisite: consent of instructor. Cunningham, Lee, Vagner.

GRADUATE COURSES

***MuE 501. Research.** Hours to be arranged.

Prerequisite: consent of dean.

***MuE 503. Thesis.** Hours to be arranged.

MuE 505. Reading and Conference. Hours to be arranged.

Prerequisite: consent of dean.

MuE 507. Seminar. Hours to be arranged.

MuE 508. Workshop. Hours to be arranged.

MuE 509. Practicum. Hours to be arranged.

MuE 532. Basic Concepts in the Teaching of Music. 3 hours.

Principles and issues in the teaching of music. Nye.

MuE 533. Music in the Elementary School. 3 hours.

Theory, supervision, curriculum, materials, and procedures of vocal-music teaching in the elementary school. Nye.

MuE 534. Music in the Junior High School. 3 hours.

Continuation of MuE 533. Whitfield.

MuE 535. Music in the Senior High School. 3 hours.

Curricula, organization, methods, and materials in senior high-school music, both vocal and instrumental. Gustafson, McManus.

MuE 536. Administration of School Music. 3 hours.

Principles underlying a sound policy in the administration of school music programs; budgets, personnel, curriculum, facilities. Ellefson, Gustafson, Nye.

MuE 537. Comparative Music Pedagogy. 3 hours.

Comparative study of the teaching of school music in different cultures; critical judgment of curricula and methods. Cykler.

MuE 591. Advanced Pedagogy. 3 hours any term (9 hours maximum credit).

* No-grade course.

School of Nursing

JEAN E. BOYLE, M.N., Director of the School of Nursing.

THE UNIVERSITY OF OREGON has offered professional courses in nursing in Portland since 1919. The first course of study was in Public Health Nursing and was administered through the Portland Division of the School of Sociology and the Portland School of Social Work. In 1926 the University introduced the nursing curriculum leading to a bachelor's degree. As part of the reorganization of the State System of Higher Education in 1932, the Portland School of Social Work was discontinued and the program in nursing was transferred to the University of Oregon Medical School and established in a Department of Nursing Education. A graduate program, leading to a Master of Science degree, was established in 1955. In the fall of 1960, the department was reorganized as the University of Oregon School of Nursing.

The School of Nursing offers a curriculum leading to a Bachelor of Science degree. It is designed for two types of students, those with no previous preparation in nursing and those who are graduates of hospital- or community-college schools of nursing. The curriculum includes preparation in public health nursing.

The School of Nursing also offers an advanced curriculum leading to a Master of Science degree in Nursing Education. A major in medical surgical nursing is offered. This program is planned to prepare nurses for faculty positions.

The freshman year of the baccalaureate-degree program is offered on the Eugene campus of the University of Oregon (see page 207) and by other accredited colleges and universities. The remainder of this program, as well as the master's degree program, is completed at the University of Oregon School of Nursing located on the Medical School campus in Portland. The program includes study in arts and sciences. Professional study is offered throughout the curriculum, with greater concentration during the junior and senior years. The School of Nursing utilizes the hospitals and clinics of the Medical School. In addition, the following off-campus facilities are used: selected health departments; the Visiting Nurse Association; the Oregon State Hospital, Salem; Physicians and Surgeons Hospital, Portland; Veterans Administration Hospital, Portland; Portland State College; the Portland Continuation Center of the Division of Continuing Education of the Oregon State System of Higher Education.

Upper-division courses in public health nursing are offered on the Eugene campus for senior students in the School of Nursing who are assigned to health agencies in Eugene for clinical experience.

The curricula in nursing meet University standards and requirements. The School of Nursing is a member of the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing; its baccalaureate program is accredited by the National Nursing Accrediting Service and the Oregon State Board of Nursing. The baccalaureate program is approved for preparation for public health nursing.

Detailed information concerning the School of Nursing is published in a separate catalog, copies of which will be furnished by writing to: Director, University of Oregon School of Nursing, 3181 S.W. Sam Jackson Park Road, Portland, Oregon 97201.

Department of Military Science and Aerospace Studies

ELBERT R. CURTIS, M.S., Colonel, U.S. Army; Head of Department; In Charge of Army R.O.T.C. Program.

BYRON R. BAILEY, B.S., Colonel, U.S. Air Force; In Charge of Air Force R.O.T.C. Program.

THE DEPARTMENT OF MILITARY SCIENCE AND AEROSPACE STUDIES is organized as a regular instructional division of the University. The department includes a U.S. Army Instructor Group, Senior Division Reserve Officers' Training Corps, offering instruction in military science, and a unit of the Air Force Reserve Officers' Training Corps, offering instruction in aerospace studies.

The mission of the department is to select and prepare students to serve as commissioned officers in the United States Army and the United States Air Force, and to promote understanding of problems and policies of national security. The instruction includes a two-year lower-division program and a two-year upper-division program.

Lower-Division Program. The lower-division program is elective for men students who are under 23 years of age on first enrollment in the University, who are citizens of the United States, and who meet prescribed physical standards. Students who are members of any of the reserve forces of the armed services or who have served on active duty in any of the armed services should consult the department concerning eligibility for advanced standing.

Upper-Division Program. The upper-division program includes two years of instruction on the University campus, plus a summer training period. Completion of the upper-division program and academic requirements for a bachelor's degree qualifies the student for appointment as a commissioned reserve officer.

The summer training period, normally in the summer between the student's junior and senior years, is conducted at one of the regular installations of the Army or Air Force. It provides application of theory and familiarization with weapons, operations, organizational methods, and installational activities.

Students enrolled in the upper-division program receive retainer pay for a total period of not to exceed twenty months (the current rate is \$50 a month). Students are issued all required textbooks and uniforms. During the summer training period, students are rationed and quartered, are paid at the rate for service academy cadets, and receive a travel allowance of 6 cents a mile to and from the training installation.

Admission to Upper-Division Program. To be admitted to the upper-division program, a student must have completed either (1) the lower-division program offered by the University or (2) a six-week field training course at an Army or Air Force installation during the summer between his sophomore and junior years. Other qualifications for eligibility are as follows:

- (1) Acceptance by the University of Oregon as a regularly enrolled student.

(2) Selection for advanced training by R.O.T.C. and University officials, with the concurrence of the President of the University of Oregon.

(3) Ability to complete all requirements for appointment as a second lieutenant before reaching 28 years of age (if scheduled for Air Force flight training, the student must be able to complete all requirements for appointment as a reserve officer before reaching the age of 26 years, 6 months).

(4) Successful completion of such survey or general screening tests as may be prescribed.

(5) United States citizenship.

(6) Physical qualification for appointment as a commissioned officer.

(7) Execution of a written agreement with the United States government to complete the two-year upper-division program, including attendance at the summer training period, and to satisfy the service obligation after graduation.

Relation of R.O.T.C. to Selective Service. Enrollment in the R.O.T.C. program does not waive the requirement for registration under the Universal Military Training and Service Act of 1951; all students who are 18 years of age must register with their local draft boards.

Students accepted for enrollment in the lower-division program may be granted draft deferment. Students enrolled in the upper-division program are enlisted in the armed services reserves until completion of the program. Students receiving R.O.T.C. deferment are required to satisfy their service obligations as commissioned officers after graduation and appointment.

Military Science

Professor: COLONEL E. R. CURTIS.

Assistant Professors: MAJOR J. H. PECKHAM, MAJOR M. G. WINTER, MAJOR J. A. ZUMBRUNNEN, CAPTAIN K. L. BEACH.

Administrative Specialist: SERGEANT MAJOR J. J. FREITAG.

Technical Specialists: SFC LOUIS R. NADELL, SFC A. R. AMENT, STAFF SERGEANT JOSEPH MARTINEZ.

THE MILITARY SCIENCE PROGRAM has as its principal objective the production of junior officers who, by their education, training, and inherent qualities, are capable of filling positions of leadership in the active and reserve components of the United States Army. For students who take only the lower-division program, a second objective is to provide a broad concept of the role and problems of the United States Army and the part it plays in national defense.

Students who complete the upper-division program, receive a baccalaureate degree from the University, and qualify for designation as distinguished military graduates may apply for appointment as commissioned officers in the regular Army.

Flight Training. A program of flight training is offered, without charge, to selected students who are enrolled in Military Science IV (Mil 411, 412, 413) or have completed Military Science IV and are still enrolled in the University as undergraduates. Information concerning eligibility requirements may be obtained in the Army R.O.T.C. office.

LOWER-DIVISION COURSES

Mil 121, 122, 123. **Military Science I.** 1 hour each term.

Organization of the Army and the Army R.O.T.C.; individual weapons and marksmanship; United States Army and national security; counterinsurgency; leadership laboratory. Students enrolled must also take a course within the general academic area of effective communications, general psychology, science comprehension, or political institutions and political development which carries 2 or more term hours of credit and satisfies the University group requirement.

Mil 221, 222, 223. **Military Science II.** 1 hour each term.

Map and aerial photograph reading; American military history; introduction to basic tactics and techniques; counterinsurgency; leadership laboratory.

UPPER-DIVISION COURSES

Mil 311, 312, 313. **Military Science III.** 4 hours each term.

Leadership; military teaching principles; branches of the Army; small-unit tactics and communications; counterinsurgency; precamp orientation; leadership laboratory.

Mil 411, 412, 413. **Military Science IV.** 4 hours each term.

Operations; logistics; Army administration; military law; the role of the United States in world affairs; counterinsurgency; service orientation; leadership laboratory.

Aerospace Studies

Professor: COLONEL B. R. BAILEY.

Assistant Professors: MAJOR L. G. GOLDSBOROUGH, MAJOR M. S. NICHOLSON, CAPTAIN W. E. CUNLIFFE, CAPTAIN J. L. JACOBY.

Administrative Specialists: MASTER SERGEANT L. BELCHER, JR., TECHNICAL SERGEANT D. F. HARVELL, TECHNICAL SERGEANT J. W. WALKOVIK, SERGEANT D. S. KELLY, JR.

THE AEROSPACE STUDIES CURRICULUM is designed to provide education that will develop skills and attitudes vital to the career of the professional Air Force officer, and to qualify college men for commissions in the United States Air Force. It includes two major activities, University and aerospace instruction and leadership laboratory.

Students qualify for appointment as commissioned reserve officers upon completion of the upper-division program and the award of the baccalaureate degree. Students designated as distinguished military graduates may apply for commissions in the regular Air Force.

Flight Training. The Air Force offers a flight instruction program to senior cadets who will enter pilot training after commissioning. The flight training, conducted at a local F.A.A.-approved civilian flying school, provides flight instruction of sufficient scope to qualify the student in the basic principles of flying in aircraft of 65-200 horsepower. Students who successfully complete the flight instruction program may qualify for a private pilot's license.

LOWER-DIVISION COURSES

AS 121, 122, 123. **Aerospace Studies I.** 1 hour each term.

Study of nature and principles of military conflict, national power, Department of Defense, U. S. Air Force, strategic offense forces, and strategic defense forces. Corps training provides practical leadership experience in basic military and officer-type activities.

AS 221, 222, 223. **Aerospace Studies II.** 1 hour each term.

Study of general-purpose forces, aerospace support forces, ideological conflict, alliances and collective security, and the search for peace. Corps training provides practical leadership experience in basic military and officer-type activities.

UPPER-DIVISION COURSES

AS 311, 312, 313. **Aerospace Studies III.** 3 hours each term.

Development of airpower in the United States, aerospace power today, as-

tronautics and space operations, and probable future developments in manned aircraft and space operations. Corps training provides varied advanced leadership experiences.

AS 405. **Reading and Conference.** Hours to be arranged.

Supervised individual studies, covering portions of the material of AS 311, 312, 313 and AS 411, 412, 413. Total credit earned in these sequences and in AS 405 may not exceed 18 hours. Prerequisite: consent of instructor.

AS 411, 412, 413. **Aerospace Studies IV.** 3 hours each term.

Study of Air Force leadership at the junior-officer level, including theoretical, professional and legal aspects; study of military management functions, principles, and techniques. Corps training provides varied advanced leadership experiences.

Summer Session

PAUL B. JACOBSON, Ph.D., Director of Summer Session.

THE UNIVERSITY'S Summer Session is designed to meet the educational needs of a broad range of people. The program is arranged to include a wide variety of courses offered within convenient time periods and includes the following categories of course work:

Eleven-week session. Courses offered in the eleven-week session are primarily for undergraduates who wish to accelerate their progress toward a degree. Sixteen or more term hours of credit may be earned during this session.

Three-term sequences in the eleven-week session. In some departments, a three-term sequence may be taken by students wishing to complete a full year's work in one subject during the eleven-week session.

Eight-week session. Courses offered in the eight-week session are designed for both undergraduate and graduate students. Students may normally earn 12 or 13 term hours of credit in this session.

Special courses. Workshops, institutes, conferences, and seminars of varying length and starting at various times are offered throughout the Summer Session.

Students may take courses in any combination of the above time periods.

Formal admission to the University is not required for enrollment in the Summer Session. However, the summer student who wishes to become a candidate for a degree from the University or intends to continue his studies in the fall, winter, or spring term is encouraged to complete regular University admissions procedures. As early as possible before the opening of the Summer Session, such a student should send to the Director of Admissions: (1) an application on an official University form; (2) a \$10.00 application fee (this fee is not refundable); (3) official transcripts of all high-school and college records.

A student who is unable to qualify for fall-term admission on the basis of his high-school record or College Entrance Examination Board test score, may qualify for admission by doing acceptable work during summer session. Both resident and nonresident students seeking to qualify for fall-term admission may choose between registering in a 9-term-hour structured program or 12-term-hour unstructured program of elective course work. The 9-term-hour structured program must include 3 units of writing and any 6-unit combination of humanities, social science, or science. In either the structured program or the unstructured program, resident students are required to earn a 2.00 grade-point average to qualify for fall-term admission; nonresident students must earn a 2.25 grade-point average to qualify for fall-term admission. Further information may be obtained from the Summer Session Bulletin published annually in February.

Prefreshman students are urged to write the Office of Admissions for more information before the beginning of the Summer Session.

Continuing Education

THE CONTINUING education program is primarily an extension of the University resources to persons not regularly enrolled as students on campus. This program may be in courses offered for credit or no credit, or in conferences, cultural offerings, and special educational service projects.

Programs of the University reach many communities in Oregon and are developed to meet varying needs. They are designed to help people learn to do their jobs well, to lead useful lives, and to make good use of leisure time.

Special educational programs are also provided in other areas of the state by means of correspondence study and educational broadcasts.

Detailed information may be obtained by contacting the University of Oregon Office of Continuing Education and Continuation Center, Education Annex, University of Oregon, Eugene, Oregon.

Summary of Enrollment and Degrees Granted 1966-67

ENROLLMENT BY CLASS AND MAJOR, REGULAR SESSIONS, 1966-67

Division	Sp	Fr	So	Jr	Sr	Gr	Total
College of Liberal Arts:							
Lower Division	176	2,374	3,162	....	....	....	5,712
Anthropology	23	21	85	129
Asian Studies	10	8	....	18
Biology	37	43	131	211
Chemistry	18	19	98	135
Comparative Literature	27	27
Economics	35	67	94	196
English	168	121	252	541
General Arts & Letters	8	5	....	13
General Science	46	36	....	82
General Social Science	89	49	....	138
Geography	15	12	31	58
Geology	17	9	34	60
History	104	98	142	344
Mathematics	71	45	167	283
Classics, Chinese & Japanese	3	2	7	12
German & Russian	23	10	35	68
Romance Languages	53	46	58	157
Philosophy	6	11	32	49
Physics	9	12	83	104
Political Science	80	56	88	224
Pre dentistry	64	72	28	8	3	175
Prelaw	136	124	34	4	1	299
Premedical Technology	22	26	9	1	1	59
Premedicine	4	134	137	64	20	2	361
Pre nursing	69	33	5	15	1	123
Psychology	89	52	98	239
Sociology	130	92	91	313
Speech	48	39	96	183
College of Liberal Arts	180	2,799	3,554	1,222	901	1,657	10,313
School of Architecture & Allied Arts:							
Architecture	99	177	45	321
Art Education	32	24	22	78
Art History	8	5	9	22
Fine & Applied Arts	42	34	64	140
Landscape Architecture & Urban Planning	7	23	41	71
School of Architecture & Allied Arts	188	263	181	632
School of Business Administration:							
Accounting & Business Statistics	50	51	32	133
Finance & Business Environment	73	50	97	220
Marketing, Insurance & Transp.	64	52	61	177
Personnel & Industrial Management	51	45	66	162
School of Business Administration	238	198	256	692
School of Education	207	137	665	1,009
School of Health, Physical Education & Recreation:							
Health Education	6	13	36	55
Physical Education	45	46	112	203
Recreation & Park Management	54	28	30	112
School of Health, Physical Education & Recreation	14	116	165	105	87	178	665
School of Journalism	102	60	60	222
School of Law	2	19	208	229
School of Librarianship	81	81
School of Music	43	37	95	175
Interdisciplinary Studies	128	128
Unclassified	165	165
Total Eugene campus	194	2,915	3,719	2,107	1,702	3,674	14,311
Dental School (Portland)	*39
Medical School (with Nursing; Portland)	*88
Total University of Oregon	15,58

* Enrollment total for the academic year, all sessions.

ENROLLMENT AND DEGREES

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ENROLLMENT BY PROFESSIONAL OBJECTIVE, EUGENE CAMPUS, REGULAR SESSIONS, 1966-67

Field	Men	Women	Total
Liberal arts & general	4,081	3,139	7,220
Architecture & allied arts	863	414	1,277
Business administration	1,312	154	1,466
Dentistry	163	12	175
Education	483	1,081	1,564
Health, physical education & recreation	370	295	665
Journalism	283	215	498
Law	508	20	528
Librarianship	15	66	81
Medicine & medical technology	325	95	420
Music	139	155	294
Nursing	1	122	123
Total	8,543	5,768	14,311

ENROLLMENT BY SEX, ALL SESSIONS, 1966-67

Session	Men	Women	Total
Summer sessions at Eugene, 1966	3,471	2,600	6,071
Fall term at Eugene, 1966-67	7,840	5,210	13,050
Winter term at Eugene, 1966-67	7,381	4,932	12,313
Spring term at Eugene, 1966-67	6,997	4,778	11,775
Net total, regular sessions at Eugene, 1966-67	8,543	5,768	14,311
Net total, all sessions in Portland, 1966-67	735	541	1,276
Net total all sessions University of Oregon, 1966-67	11,319	7,969	19,288

SUMMARY OF DEGREES GRANTED, 1966-67

Degree	Men	Women	Total
Advanced degrees:			
Doctor of Philosophy	107	14	121
Doctor of Business Administration	11	1	12
Doctor of Dental Medicine	73	...	73
Doctor of Education	38	1	39
Doctor of Jurisprudence	47	...	47
Doctor of Medicine	74	6	80
Master of Arts	181	89	270
Master of Science	219	99	318
Master of Architecture	3	...	3
Master of Business Administration	71	2	73
Master of Education	101	93	194
Master of Fine Arts	24	3	27
Master of Landscape Architecture	1	...	1
Master of Library Science	1	9	10
Master of Music	21	5	26
Master of Urban Planning	1	...	1
Total advanced degrees	973	322	1,295
Bachelor's degrees:			
Bachelor of Arts	296	337	633
Bachelor of Science	683	417	1,100
Bachelor of Architecture	34	...	34
Bachelor of Business Administration	71	2	73
Bachelor of Education	2	17	19
Bachelor of Interior Architecture	1	1	2
Bachelor of Landscape Architecture	5	2	7
Bachelor of Music	10	9	19
Total bachelor's degrees	1,102	785	1,887
Total degrees granted	2,075	1,107	3,182

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